ORDER NO. VRD-8310-489

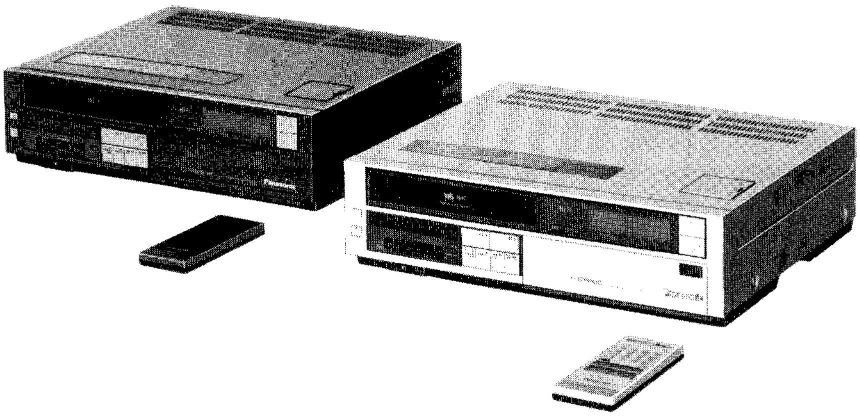
Service Manual

Video Cassette Recorder

Panasonic VHS Hi-Fi

NV-850-E -EG -B

General Description
Adjustment Procedures
Block/Schematic Diagrams
Exproded Views/Parts List



SPECIFICATIONS

Power Source:		220V AC 50/60Hz (NV-850-E/-EG) 240V AC 50/60Hz (NV-850-B)
Power Consumption:		Approx. 38 watts
Television System:		CCIR: 625 lines, 50 fields PAL colour signal CCIR: 625 lines, 50 fields
Video Recording System:		2 rotary heads, helical scanning system Luminance: FM azimuth recording Colour signal: converted subscarrier phase shift recording
Audio Track:		1 track (Normal), Hi-Fi 2CH
Tape Format:		Tape width 12.7mm high density tape
Tape Speed:		23.39mm/s
Record/Playback Time:		240min. with NV-E240
FF/REW Time:		Less than 5.5min. with NV-E180
Heads:	Video:	3 rotary heads 1 pair for video normal recording and playback (R-L Head) 1 pc. of head for video trick play with L head (field still)
	Audio:	1 pair for audio Hi-Fi recording and playback (AR-AL Head)
	Audio/Control:	1 stationary head
	Erase:	1 full track erase
Input Level:	Video:	VIDEO IN connector (BNC) 1.0Vp-p, 75Ω terminated AV jack (DIN 45482: NV-850-E/-EG) 1.0Vp-p, 75Ω terminated
	Audio:	LINE IN jack (Phono jack)×2 More than −20dB, 50kΩ AV jack (DIN 45482: NV-850-E/-EG) More than −10dB, 10kΩ MIC (M6) −70dB, More than 3.9kΩ
	TV Tuners:	VHF CH2～CH12 (NV-850-E/-EG) UHF CH21～CH69
Output Level:	Video:	VIDEO OUT connector (BNC) 1.0Vp-p, 75Ω terminated AV jack (DIN 45482: NV-850-E/EG) 1.0Vp-p, 75Ω terminated
	Audio:	LINE OUT jack (Phono jack) −8dB, less than 1kΩ AV jack (DIN 45482: NV-850-E/-EG) −8dB, less than 1kΩ HEADPHONE jack −34dBV max, 8Ω
	RF Modulated:	UHF CH36 ± 4 73 ± 3dBμ 75Ω unbalanced
Weight:		9.6kg
Dimensions:		430(W)×115(H)×370(D)mm
Accessory Supplied:		1 pc. DIN-RF Cable 1 pc. Video Cassette Tape 1 pc. Wireless Remote Controller, 2 pc. Audio Cable
Optional Accessories:		Video cassette tape: NV-E240 Approx. 344m, 240 min. NV-E180 Approx. 258m, 180 min. NV-E120 Approx. 174m, 120 min. NV-E60 Approx. 88m, 60 min.

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

INTRODUCTION

This service manual contains technical information which will allows service technicians to understand and service the PAL VHS Hi-Fi Video Cassette Recorder Model NV-850E/EG/B.
The NV-850E/EG/B has many special features as shown in page 1-1.
These features in addition to the basic PAL VHS Format make the unit an ideal one for your culture and entertainment.

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REMARKS: NV-850EG West Germany model only

This set can be used for special recording/playback of SECAM colour signal.
SECAM tapes which have been recorded on specified SECAM-VHS recorder can be played back in black-white on this set.

SECTION 1
GENERAL DESCRIPTION

1-1. FEATURES

1. Hi-Fi Sound System

The revolutionary new Panasonic developed Hi-Fi sound recording system features two rotary audio heads arranged on the video head cylinder, while maintaining the conventional stationary audio head for compatibility with the standard VHS system. This new rotary audio head configuration increases the relative tape/head speed, thus making it possible to record a far greater amount of signal information on the tape.

In addition, the hi-fi sound system employs an FM conversion recording method, and the audio and video signal processing circuits are completely separate. The result of this innovative system is superb sound quality with a dynamic range of 80dB, flat frequency response from 20Hz to 20kHz and 0.005% wow and flutter.

2. Playback of Prerecorded Stereo Video Cassette Tapes

The new hi-fi audio system of this VTR allows playing back video tapes of concerts, etc. in stereo with the same outstanding sound quality, that you would get from a high-end audio cassette deck, but with the tremendous added advantage of beeing able to watch your favourite orchestra, singer or actor and actress in action in brilliant colours.

3. Use as a High-Quality Audio Cassette Recorder

The excellent audio quality, outstanding tape economy, continuous 4-hours recording capability, audio recording level control, FL audio level meters and convenient tape programme search system make this VTR ideal for use as a top-quality audio cassette recorder.

4. 14-day/8 Programme Timer

The built-in timer allows automatic absentee recording of up to 8 TV programmes within 14 days. It is also possible to record a programme which is broadcast at the same time every day or every week.

5. Tape Programme Search System

By pressing the Audio Rec Mute Button for at least 4 seconds at the beginning of every recording, this tape programme search system enables fast and automatic locating of the next start of a programme in forward or reverse direction. As soon as the beginning of the programme is found, playback will start immediately. Locating a desired programme or scanning through a whole tape to check the content is perfectly easy and fast.

6. Slim Design and Front Loading System

This highly functional design allows loading the video cassette from the front, thus minimizing the space required for the placement.

7. Multi-Function Display

Whenever an operation button is pressed, the activated function is immediately indicated on this easy-to-see display. It shows you at a glance, in what operation mode the VTR is.

8. One-Touch Timer Recording (OTR)

Simply by pressing the OTR Button between 2 and 5 times, the VTR can be programmed for 30, 60, 90 or 120 minutes of recording with immediate start.

9. Standby OTR Recording

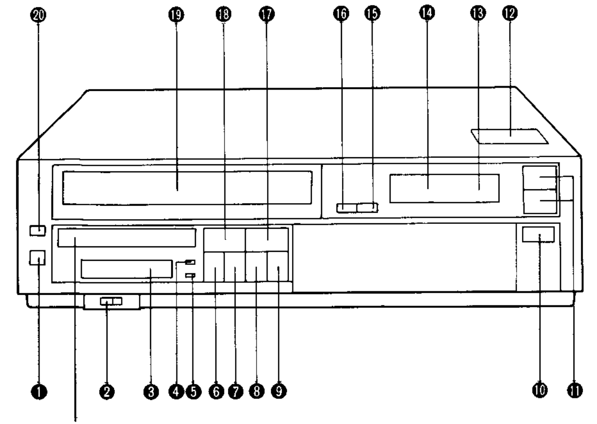
By pressing the Standby Button between 1 and 4 times, the VTR can be programmed to begin recording in 30, 60, 90 or 120 minutes. By subsequently pressing the OTR Button repeatedly, a recording duration of 30, 60, 90 or 120 minutes can be selected for this delayed OTR recording.

10. Infrared Remote Control

The wireless infrared remote control unit allows operating the following functions from the comfort of your favourite viewing position: • VTR ON/Off • Record • Play • Pause/Still • Still Advance • Cue • Review • Fast Forward • Rewind • Direct Channel Selection.

1-2. CONTROLS AND COMPONENTS

TOP AND FRONT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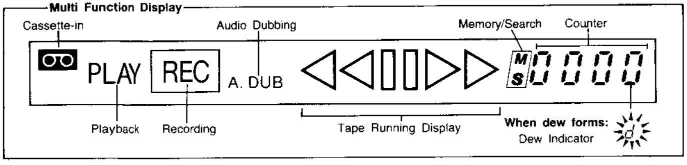
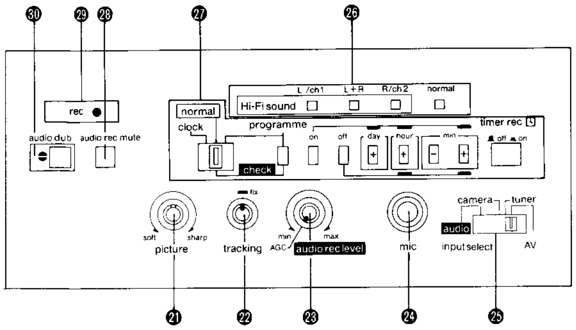

Multi Function Display
Cassette-in
Audio Dubbing
Memory/Search
Counter
PLAY
REC
A. DUB
M
S
0000
Playback
Recording
Tape Running Display
When dew forms:
Dew Indicator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rec ●
audio dub
audio rec mute
normal
L/ch1
L+R
R/ch2
normal
Hi-Fi sound
clock
programme
timer rec
on
off
day
hour
min
off
on
check
fix
soft
sharp
picture
tracking
AGC
min
max
audio rec level
mic
camera
tuner
audio
input select
AV
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① VTR ON/OFF Switch

② Audio Level Meter Selector Switch
Selecting this Audio Level Meter Selector Switch, the Audio Level Meter (3) display the audio recording level or condition of the Hi-Fi audio tracking.

③ Audio Level Meter

④ Reset Button
Push the reset button to reset the Counter of Multi-Function Display to "0000".

⑤ Memory/Search Button
If you want find a certain tape position again later, reset the tape counter at that point and press the "memory/search" button once.
During Rewind or Fast Forward, the tape will stop automatically at the tape counter position "0000".
The convenient Tape Programme Search function of this VTR locates blank spaces in the audio track (that mark the beginning of the programmes) during Cue or Review playback. As soon as the next blank space is reached, the recording starts automatically if the search was started from the playback mode. If it was started from the still mode, it will be stopped in the still mode.

1. Press the "audio rec mute" button (28) more than 4 seconds during recording to mark the beginning of a programme.
2. Press memory/search Button twice, then "S" appears on the Multi-Function Display.
3. Press the Play Button (17) (or the Playback and Pause/Still Buttons).
4. Press the Rewind/Review (8) or Fast Forward/Cue Button (9) to start the tape programme search function.
   The tape programme start without sound reproduction will start.

⑥ Pause/Still Button
Push to temporarily stop the tape during recording in order to avoid recording unwanted material, or to view a paused picture during playback. Push again to release the tape from pause.

⑦ Still Advance Button
During pause mode, press the Still Advance Button. Each time you press this button, the still-picture will advance one single frame. A slow motion effect with noise is obtainable by holding down the Still Advance Button (about 1/6 speed of normal playback).

⑧ Rewind/Review Button
Push to rewind the tape.
When this button is pressed during playback, the picture can be scanned in reverse at 5 times normal speed. Review will continue as long as the button is depressed.

⑨ Fast Forward/Cue Button
Push to fast-forward wind the tape.
When this button is pressed during playback, the picture can be scanned will play back at 5 times normal speed. Cueing will continue as long as the button is depressed.

⑩ Infra-red Remote Control Receiver
Receives the signal from the Infra-red Remote Control.

⑪ Channel Selection Up and Down Buttons
Push the desired channel selector buttons to select the channel you wish to view or record.

⑫ Tuner Set-up Controls
Used to tune to any broadcast channel in your area.

⑬ Channel Display

⑭ Time Display
Indicates either the time and day or recording start/stop times for the timer recording.

⑮ OTR Button
Automatic recording for 30, 60, 90 or 120 minutes is possible by pushing this button.

⑯ Stand by Button
OTR recording can start after a delay of 30, 60, 90 or 120 minutes.

1. Select the TV channel to be recorded.
2. Press the "stand by" Button repeatedly to select the time delay.
   The "stand by" indication will flash.
3. Press the OTR Button repeatedly to select the desired recording duration.
   - After selecting time delay for the OTR recording start in step 2, the OTR Button must be pressed within 8 seconds to select the OTR recording duration, otherwise the selected delay will be cancelled.

⑰ Play Button
Push to play back a recorded tape.

⑱ Stop Button
Push to stop the tape.

⑲ Cassette Holder

⑳ Eject Button
Press this button to remove the cassette.

㉑ Picture Sharpness Control
The picture sharpness control enables the playback picture to be adjusted so that its outlines are made sharper or softer.
It has no effect when recording.

㉒ Tracking Control

Noise Picture

Tapes recorded on another machine show noise or a streaky playback picture, rotate this control slowly in either direction until the picture is clear. The control should normally be kept in the "FIX" position.

If the sound is not satisfactory during playback of a cassette tape that was recorded on another Hi-Fi video recorder, set the Level Meter Selector Switch (2) to 'Hi-Fi tracking' and adjust for optimum sound reproduction by slowly turning the Tracking Control while watching Audio Level Meter (3).

㉓ Audio Rec Level Control
Set the Audio Level Meter Selector Switch to "audio level" and adjust the audio rec level control while watching the level meters. (It is recommended to adjust so that peaks in the audio level reach about +6dB.) When the Audio Rec Level Control is set to the AGC position, the recording level is automatically adjusted.

㉔ Microphone Input Socket
For connecting a microphone.

㉕ Input Signal Selector
For selecting the input signal to be recorded.

CAMERA: To make a recording with using a video camera which is connected to the Video Input Jack and the Audio Input Jack.
TUNER: To record a TV programme with the built-in tuner of the VTR.
AV: To record and playback when using the AV connection.
AUDIO: To record and playback the audio signal when using the NV-850 as a Hi-Fi and TV recorder.

㉖ Sound Track Selector
Press the sound selector button for the desired sound mode, as shown below. If no sound selector button is pressed, the sound from the normal sound track (always in mono) will be played back.

L/ch1 ......Left
L+R ......L+R
R/ch2 ......Right
normal......Mono (normal)

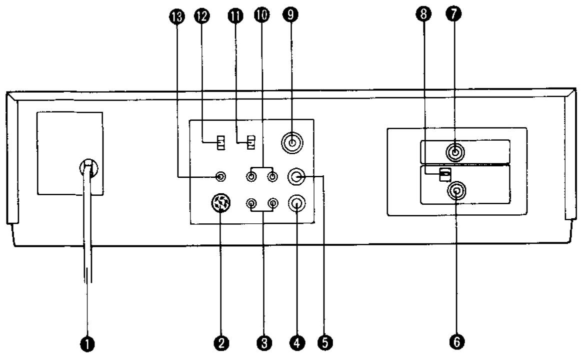
㉗ Timer Controls
The timer controls are used to set the clock for the present time and to programme start and stop for timer recording.

㉘ Audio Rec Mute Button
Push the Audio Rec Mute Button when indexing the tape for tape Program Search, refer to the description of the Memory/Search Button (5).

㉙ Record Button
Push together with Play Button to start recording.

㉚ Audio Dubbing Button
When audio dubbing, the input audio signal is recorded on only the "normal" (mono) sound track.

REAR



❶ **AC Mains Cord**

❷ **AV Socket**
Central connecting socket for recording and playback of picture and sound. Connection for TV sets which are also equipped with a central AV socket. Via this socket TV programmes can be recorded, too.
Such a connection improves the picture and sound quality during playback.

❸ **Audio Output Socket**
For connecting an audio cable of a TV monitor, a component audio system, or another VTR.

❹ **Video Output Socket**
For connection to a TV monitor or another Video Cassette Recorder. Not used with an ordinary TV.

❺ **Video Input Socket**
For connecting the video cable of a video camera or an output video signal of another VTR.

❻ **RF Input Socket**
Connect the external aerial, which is now connected to the TV set, to this socket.

❼ **VTR RF Output Socket**
For connection to the antenna terminal (COAXIAL type) of TV with the DIN-DIN Coaxial Cable supplied with the unit.

❽ **RF Signal Level Switch**
Used to attenuate the reception of the VHF and/or UHF antenna signals.
If the reception is normal, set to "HIGH". If the signal strength is high and a stripped pattern appears at the top of the picture on TV, set to "LOW".

❾ **Headphone Socket**

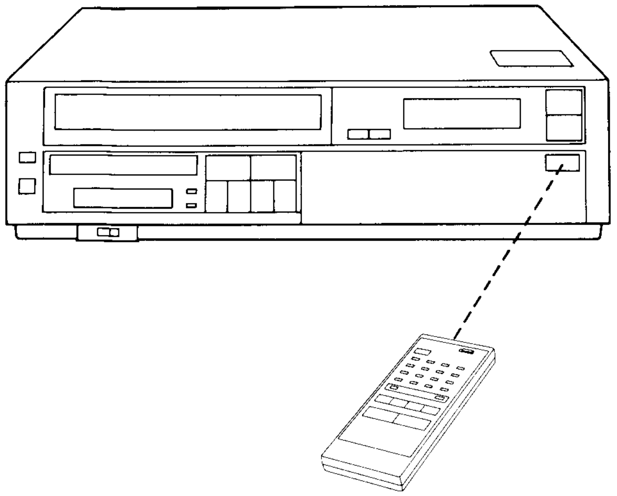
❿ **Audio Input Socket**
For connecting an audio cable of a video camera, a component audio system or another VTR.

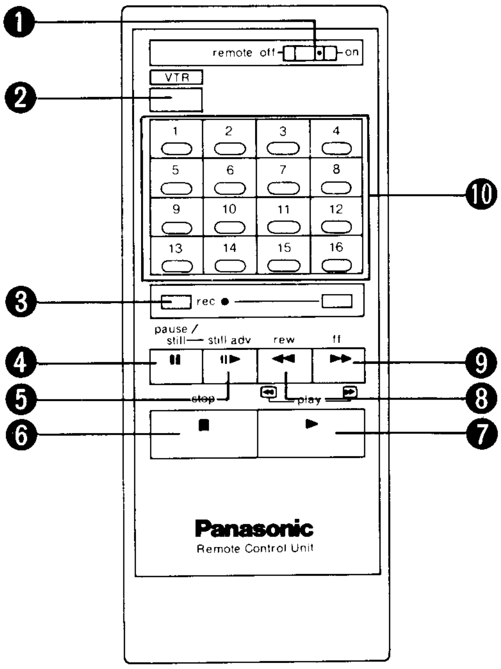
⓫ **Headphones Output Level Switch**
When using headphones, volume level can be changed by using the Headphones Output Level Switch.
Adjust the audio level by turning this control to "LOW"–"HIGH".

⓬ **Colour Mode/Test Signal Switch**
In the TEST position, a black-and-white test pattern is generated, which allows easy tuning of your TV set to the video playback channel of the VTR. For normal recording and playback operation, this switch must be in the middle AUTO position.
Only if the colour reception of a station is particularily weak, setting this switch to the COLOUR position can improve the recording quality.

⓭ **Camera Remote Control Socket**
For connecting the remote control cable of a video camera (optional).

INFRARED REMOTE CONTROLLER





1. **Remote on/off Switch**
2. **VTR on/off Button**
3. **Rec Buttons**
   To start recording, press the two buttons simultaneously.
4. **Pause/Still Button**
5. **Still Adv Button**
6. **Stop Button**
7. **Play Button**
8. **Rewind/Review Button**
   When this button is kept depressed during playback, the VTR changes over to the Review playback mode.
9. **Fast Forward/Cue Button**
   When this button is kept depressed during playback, the VTR changes over to the Cue playback mode.
10. **Channel Selector Buttons**

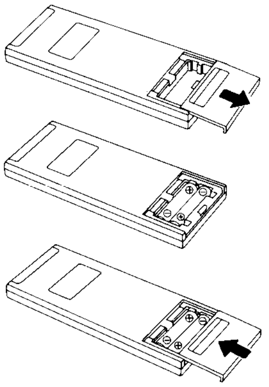
Note:
Infrared beam should be transmitted directly to the VTR. Direct sunlight may interfere with the beam.
- The lightsensing angle of the infrared reception window in the VTR is about 60°.
- The unit should be used within a range of about 7 meters from the front to the VTR.

Power Source of Infra-red Remote Controller

■ The infra-red Remote Controller is powered by two IEC "R03" size batteries. The life of the batteries is about one year, however, it depends on the frequency of use. Inspect and if necessary, replace the batteries once a year.

BATTERY REPLACEMENT CAUTION
- Load the new batteries with their polarities (⊕ and ⊖) aligned correctly.
- Do not heat, disassemble or short-circuit the old batteries.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together. (Also never use an alkaline battery with a manganese battery.)

Load the batteries as follows:



1. Remove the Battery Compartment lid.
2. Place two batteries in the Battery Compartment as indicated inside the Battery compartment.
3. Replace the lid.

SECTION 2

ADJUSTMENT PROCEDURE

2-1. MECHANICAL ADJUSTMENT PROCEDURES

The model NV-850 uses the D-1 Mechanical Chassis. Therefore, please refer to the Service Manual D-1 Chassis(Order No. VRD-8310-490) for the main mechanical adjustments.

2-1-1. DISASSEMBLY FLOWCHART

This flowchart indicated disassembly items of the cabinet parts and P.C. Boards in order to find the item(s) necessary for servicing.
When reassembling, perform the step(s) in the reverse order.

Note:
When removing the Front Panel, Work with care not for breaking the locking portion of the panel.

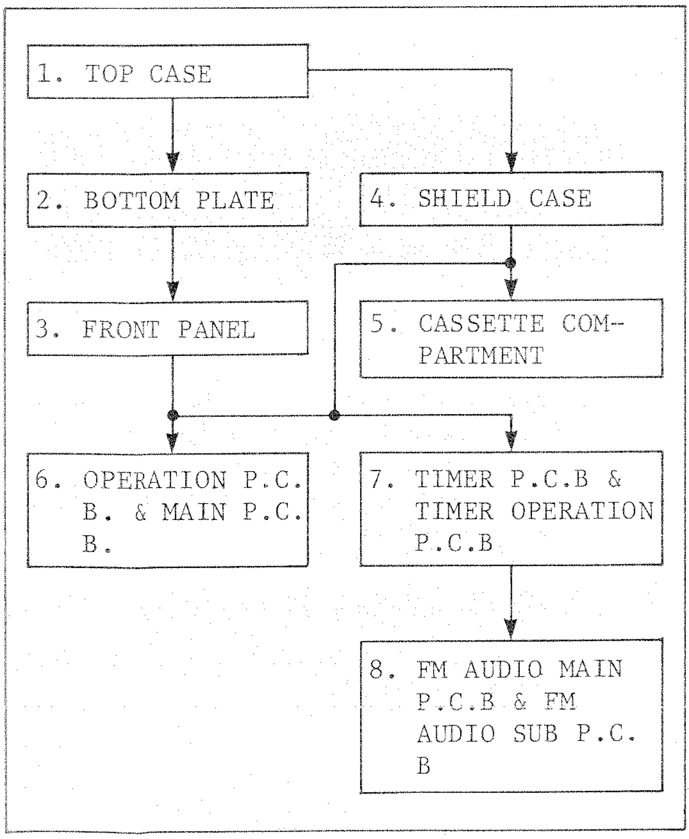

1. TOP CASE
2. BOTTOM PLATE
4. SHIELD CASE
3. FRONT PANEL
5. CASSETTE COMPARTMENT
6. OPERATION P.C.B. & MAIN P.C.B.
7. TIMER P.C.B & TIMER OPERATION P.C.B
8. FM AUDIO MAIN P.C.B & FM AUDIO SUB P.C.B

Fig. 1

2-1-2. DETAILED DISASSEMBLY METHOD

1. Removal of Top Case
   Unscrew 4 screws (A). Then carefully lift the rear of the case to remove.

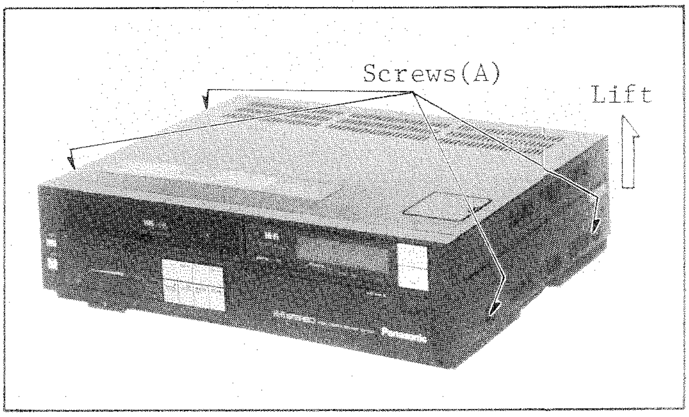

Screws(A)
Lift

Fig. 2

2. Removal of Bottom Plate
   Place the deck up side down so the bottom side face up ward.
   Then unscrew 9 screws (B) to remove.
   Note:
   Place the cushion under the deck for not being damaged the top portion of the deck.

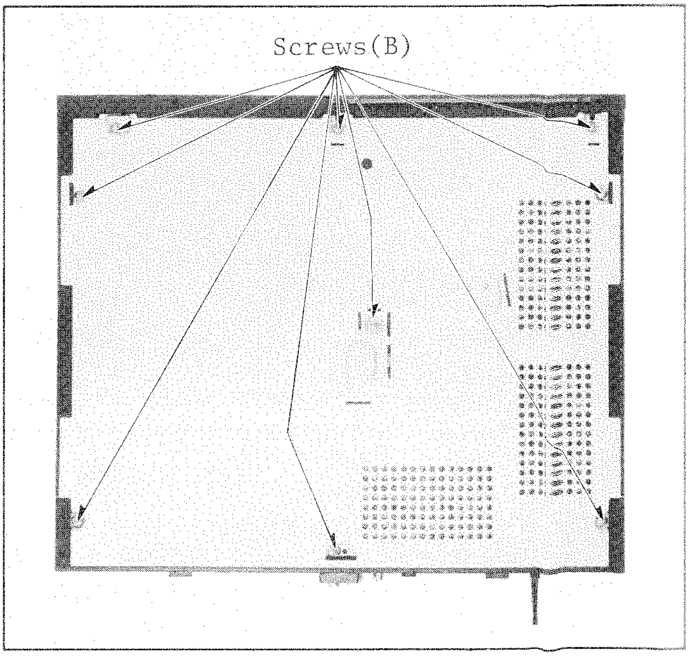


Fig. 3

3. Removal of Front Panel
Remove 3 screws (C) and unlock the 6 locking portions (D).
Then hold the top portion of the panel and turn it toward the front of the deck to remove.

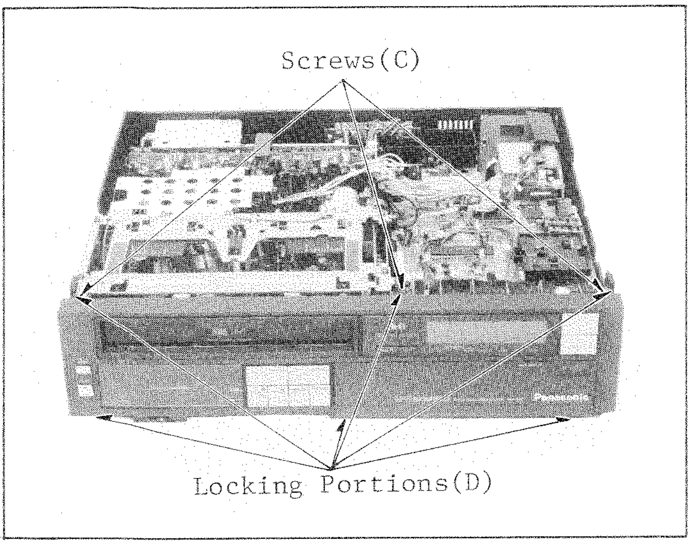


Fig. 4

4. Removal of Shield Plate
Loosen 5 secrews (E) and remove the Shield Plate.

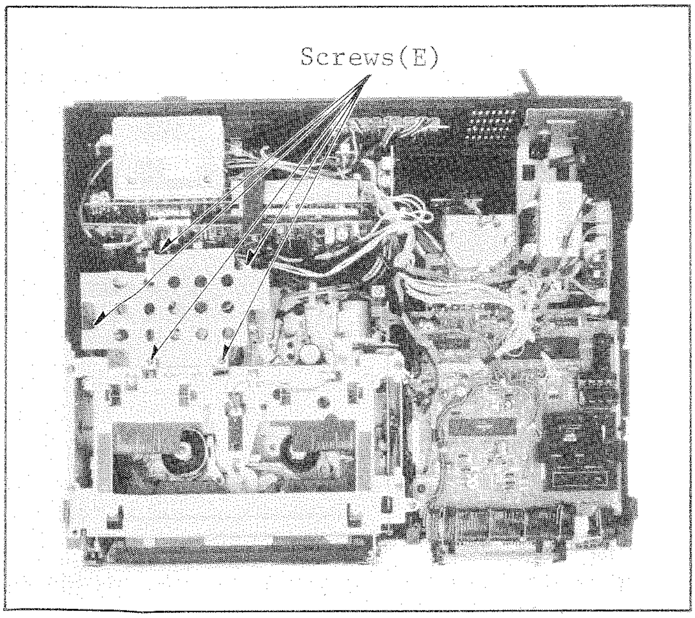


Fig. 5

5. Removal of cassette compartment
Disconnect the connector P1507 from the Front Loading Motor Connection P.C. Board, and unscrew 5 screws (F).
Then carefully pull out the Cassette Compartment.

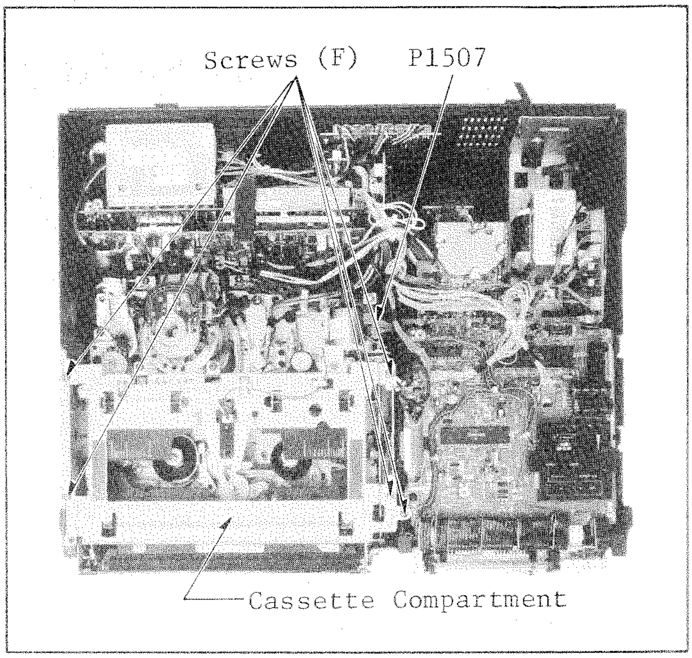


Fig. 6

6. Opening of the Operation P.C.Board and Main P.C. Board with the Head Amp & Luminance (2) P.C. Board.
(1). Unscrew 2 screws (G), and remove the Operation P.C. Board.

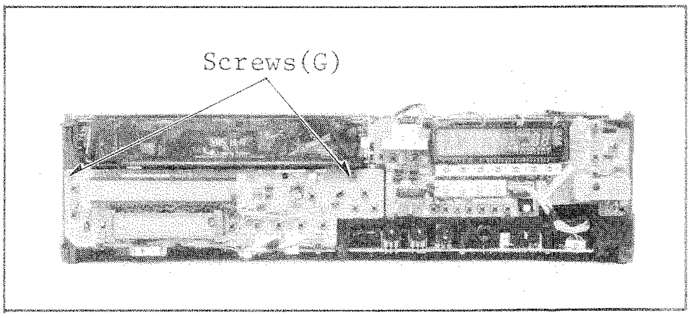


Fig. 7

(2). Unscrew 8 screws (H), and carefully unlock the 2 locking tabs (I). Then open the Main P.C. Board and the Head Amp & Luminance (2) P.C. Board.

Note: Remove the Operation P.C. Board before opening the Main P.C. Board and the Head Amp & Luminance (2) P.C. Board.

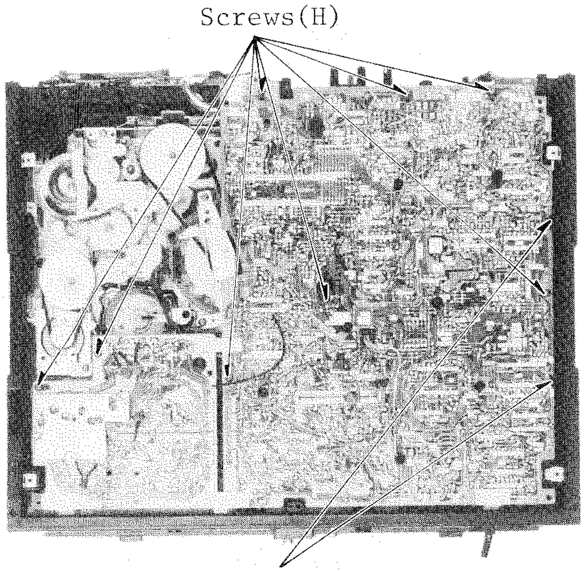

Screws(H)
Locking Tabs(I)

Fig. 8

7. Opening of the Timer P.C. Board and the Timer Operation P.C. Board.

(1) Unscrew the screw (J) to remove the earth lead, and then pay attention to short the circuit by the free lead touching the active circuit.
(2) Remove the connector wires from the Wire Hinge and clampers, and unlock the 4 locking tabs (K).
(3) Turn the Timer P.C. Board toward the front side of the deck till the 2 Locking portions (L).

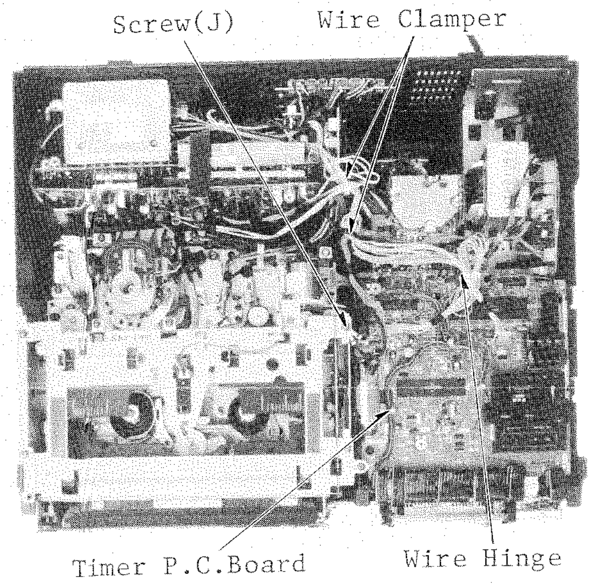

Screw(J)
Wire Clamper
Timer P.C.Board
Wire Hinge

Fig. 9

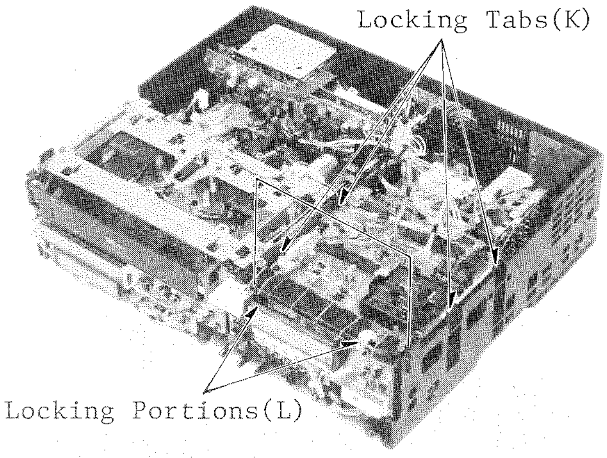

Locking Tabs(K)
Locking Portions(L)

Fig. 10

(4) Next, hold and pull out the 2 Locking Tabs (M), and open the Timer P.C. Board and timer Operation P.C. Board.

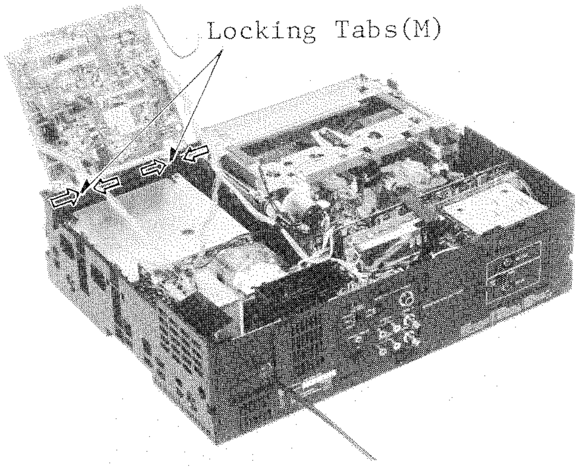

Locking Tabs(M)

Fig. 11

8. Opening of the FM Audio Main P.C. Board and the FM Audio Sub P.C. Board.

(1) Unscrew 3 screws (N) and unlock the Locking Tab (O), and turn to open the FM Audio Main P.C. Board and the FM Audio Sub P.C. Board.

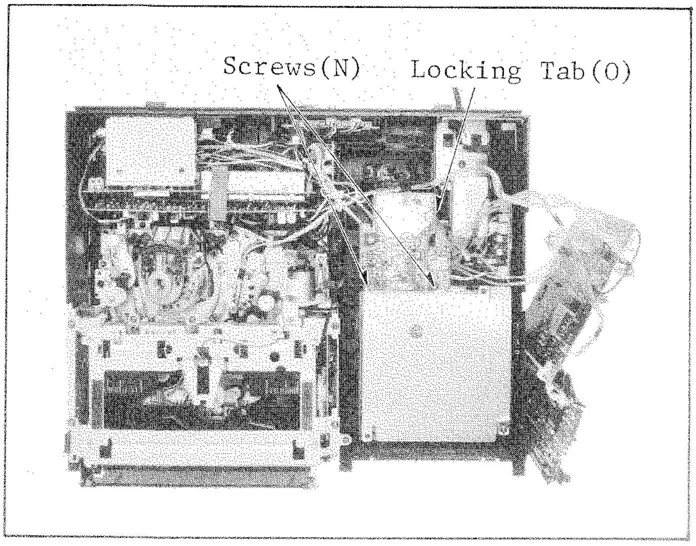

Screws(N)
Locking Tab(O)

Fig. 12

2-1-3. REPLACEMENT PROCEDURE FOR STATOR ANGLE, RT ROTOR BASE, AND UPPER CYLINDER

REMOVAL PROCEDURES

1. STATOR ANGLE

First, unscrew 2 screws (A) and then remove the Stator Angle as shown in Fig. 13.

Note: Be very careful to remove the Stator Angle so that it won't directly come into contact with lead wires alongside and the video head as well.
Never touch the Rotary Transformer and screws(E) that secure the Stator Base. If screws (E) are removed, the properly adjusted height of the Stator Base will vary.

2. RT ROTOR BASE

First, unscrew 2 screws (B), and then unsolder 4 of the soldered portions connecting the RT Rotor Base and the Upper Cylinder, and finally remove the RT Motor Base.

3. UPPER CYLINDER

Unscrew 2 screws (C) and unsolder 8 of the soldered portions indicated by arrows on the Upper Cylinder, and finally remove the Upper Cylinder.

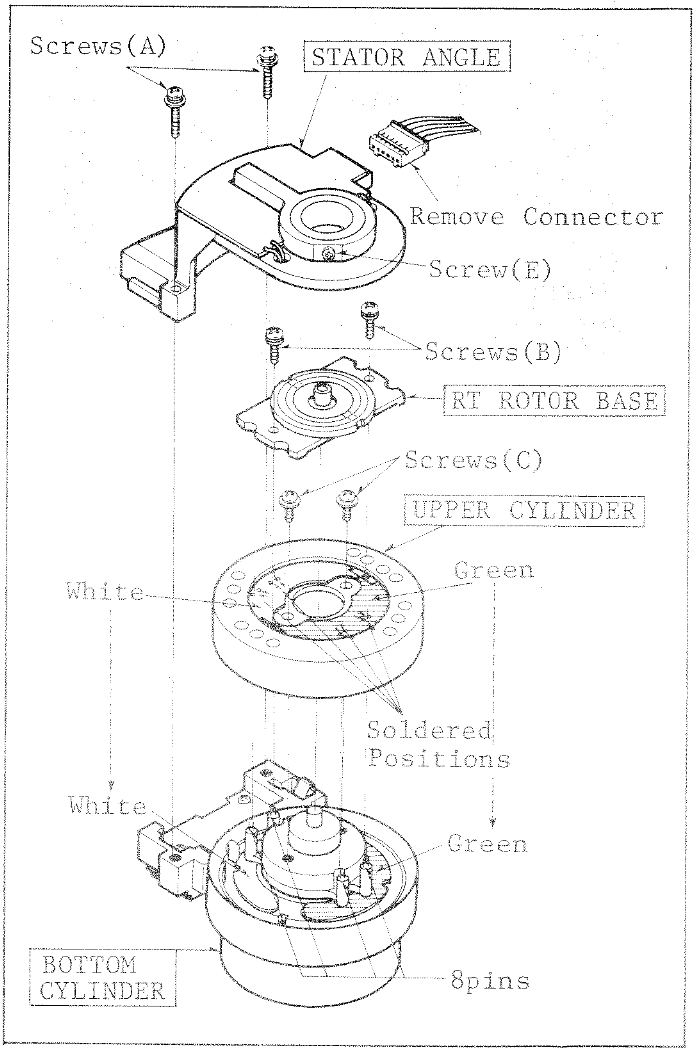

Screws(A)
STATOR ANGLE
Remove Connector
Screw(E)
Screws(B)
RT ROTOR BASE
Screws(C)
UPPER CYLINDER
White
Green
Soldered Positions
White
Green
BOTTOM CYLINDER
8pins

Fig. 13

REINSTALLATION PROCEDURES

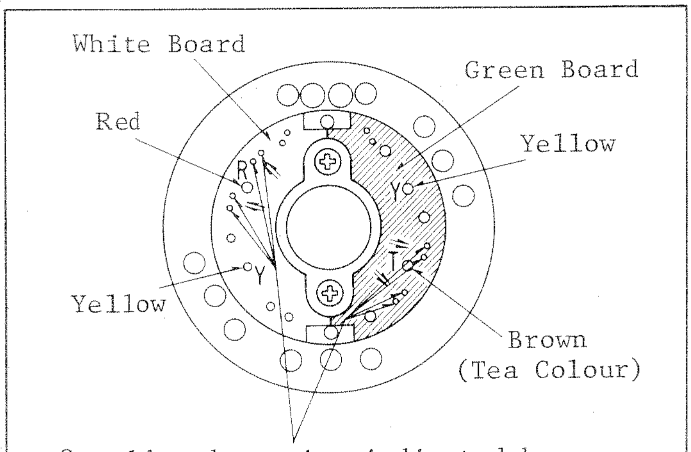
1. Reverse the Removal Procedures for reinstalling the Upper Cylinder, the RT Rotor Base, the Stator Angle.

   NOTE: The Upper Cylinder should correctly match the white and green portions of the P.C. Board of the Bottom Cylinder as shown in Fig. 13.

2. Before reinstalling the Stator Angle, as shown in Fig. 15, carefully tighten screws (A) with the designated "Stator Angle Adjustment JIG (VFK0268)". After screws (A) are properly tightened, disengage this Jig.

3. Reinstall the connector.

4. Play back the pre-recorded tape, and check the playback picture.


White Board
Green Board
Red
Yellow
R
Y
Yellow
Y
T
Brown
(Tea Colour)

8 soldered portion indicated by arrows

Fig. 14

STATOR ANGLE ADJUSTMENT JIG

To correctly reinstall the Stator Angle, the designated Stator Angle Adjustment Jig (VFK0268) must be used.

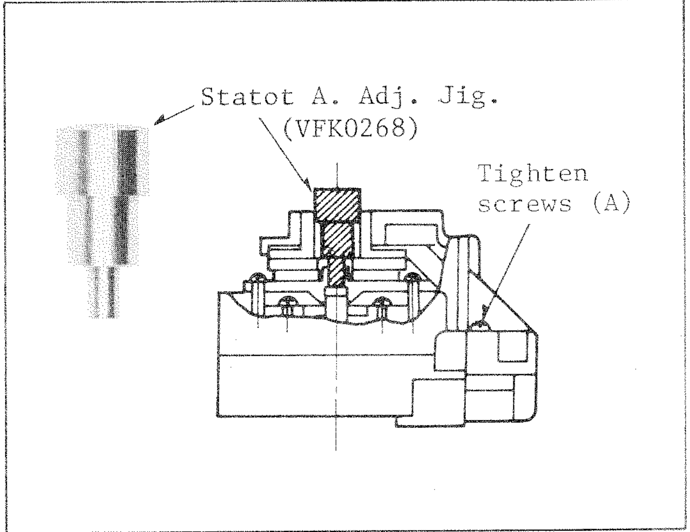

Statot A. Adj. Jig.
(VFK0268)
Tighten
screws (A)

Fig. 15

2-1-4. REPLACEMENT OF AC CORD

Note: When AC cord is replaced, please change both AC cord cover and Binding wire without fail for safety operation.

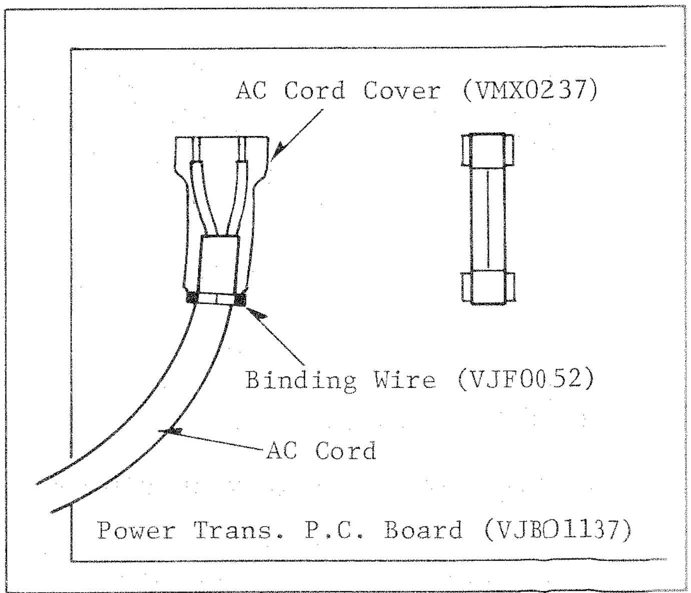

AC Cord Cover (VMX0237)
Binding Wire (VJF0052)
AC Cord
Power Trans. P.C. Board (VJB01137)

Fig. 16

2-2. ELECTRICAL ADJUSTMENT PROCEDURES

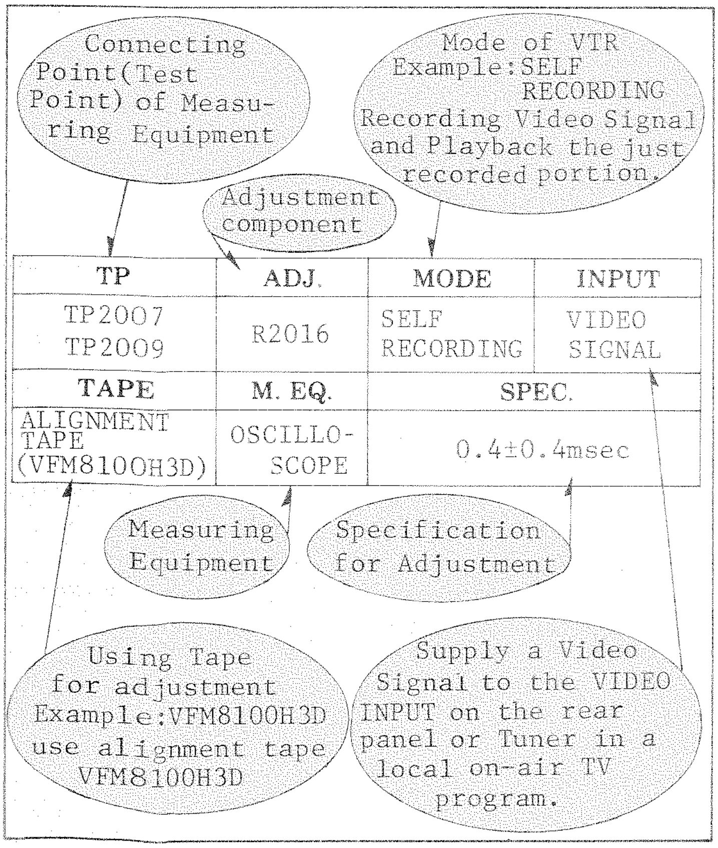
This section provides complete electrical adjustment procedures which may be required for electronic circuits of VHS Video Cassette recorder NV-850.

2-2-1. TEST EQUIPMENTS

To perform the electrical adjustments completely, following equipments are required.

1. VTVM (Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)
   Voltage Range: 0.001 - 50V
2. Dual-Trace Oscilloscope
   Voltage Range: 0.005 - 50V/div.
   Frequency Range: DC - 10MHz
   Probes: 10:1 or 1:1
3. Frequency Counter
   Frequency Range: 0 - 10MHz
4. Signal Generator (Sinewave)
   Frequency Range: 0 - 10MHz
5. Video Sweep Generator
   Frequency Range: 0 - 10MHz
6. Colour Monitor TV
7. Plastic Tip Driver
8. VHS Alignment Tape (VFM8100H3D)

2-2-2. HOW TO READ THE ADJUSTMENT PROCEDURES



Connecting Point(Test Point) of Measuring Equipment

Mode of VTR Example:SELF RECORDING Recording Video Signal and Playback the just recorded portion.

Adjustment component

TP	ADJ.	MODE	INPUT
TP2007 TP2009	R2016	SELF RECORDING	VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE (VFM8100H3D)	OSCILLO-SCOPE	0.4±0.4msec	

Measuring Equipment

Specification for Adjustment

Using Tape for adjustment Example:VFM8100H3D use alignment tape VFM8100H3D

Supply a Video Signal to the VIDEO INPUT on the rear panel or Tuner in a local on-air TV program.

Fig. 17

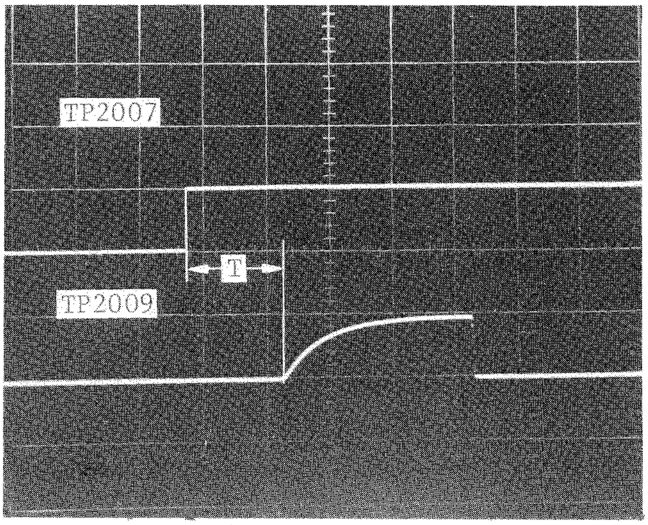


Fig. TP2007 5V/0.2msec. div. (Trigger)
TP2009 5V/0.2msec. div.

Connecting point of a scope

Division of a scope

Trigger channel of a scope

Fig. 18

POWER SUPPLY SECTION

2-2-3. REG +5V ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP1001	R1003	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	D.V.M	5.1±0.1V	

SERVO SECTION

2-2-4. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2007 TP3001	R2018	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE (VFM8100H3D)	OSCILLO-SCOPE	6.5±0.5H	

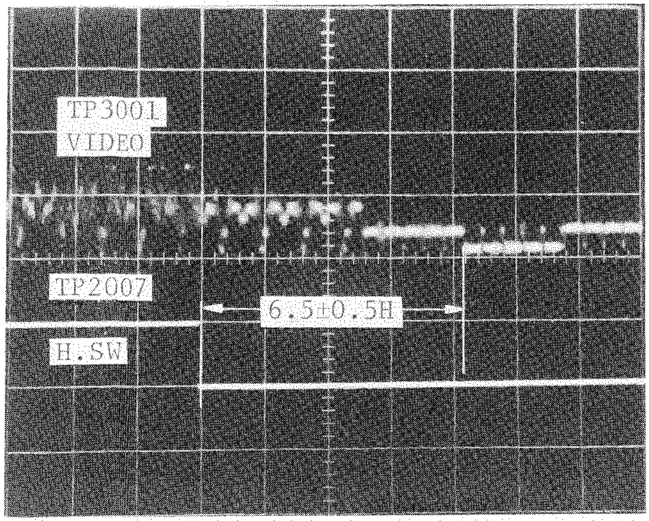


Fig. 19 TP3001 2V/0.1msec.div.
TP2007 5V/0.1msec.div.(Trigger)

2-2-5. TRACKING FIX ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2007 TP2009	R2016	SELF RECORDING	VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	T=0.4±0.4msec	

1. TRACKING VR is center fix position.
2. Playback the just recorded portion.
3. Adjust R2016 for 0.4±0.4msec. as shown below.

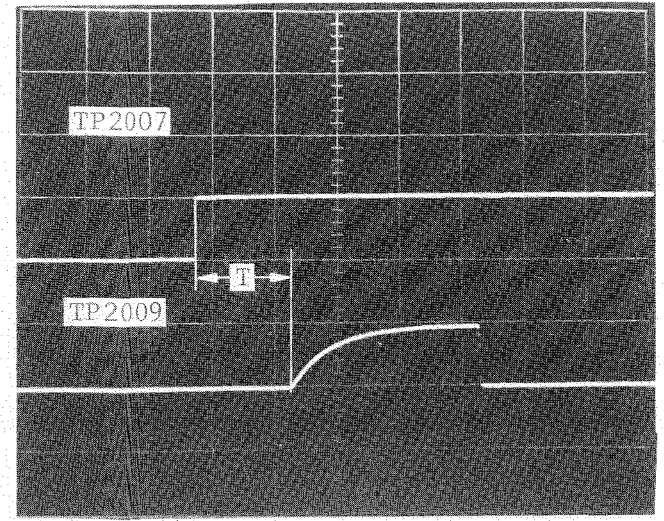


Fig. 20 TP2007 5V/0.2msec.div.(Trigger)
TP2009 5V/0.2msec.div.

2-2-6. NOISE SHIFT PULSE PHASE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2007 TP2014	R2066	STILL	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	2±0.1msec	

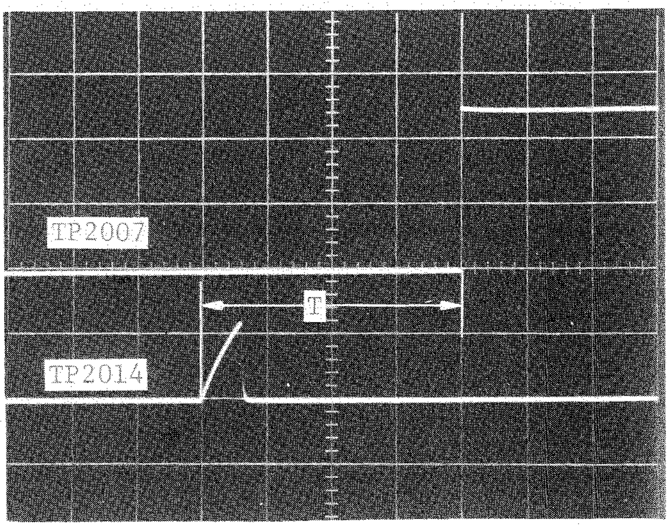


Fig. 21 TP2007 2V/0.5msec.div.(Trigger)
TP2014 2V/0.5msec.div.

2-2-7. ARTIFICAL V-SYNC ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2007 TP2010	R2072 R2085	STILL CUE/REV	
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE	OSCILLO-SCOPE	A=272±25µsec B=144±25µsec	

1. Adjust R2072 for the period "A" as 272±25µsec. during PLAY. STILL mode as shown below.

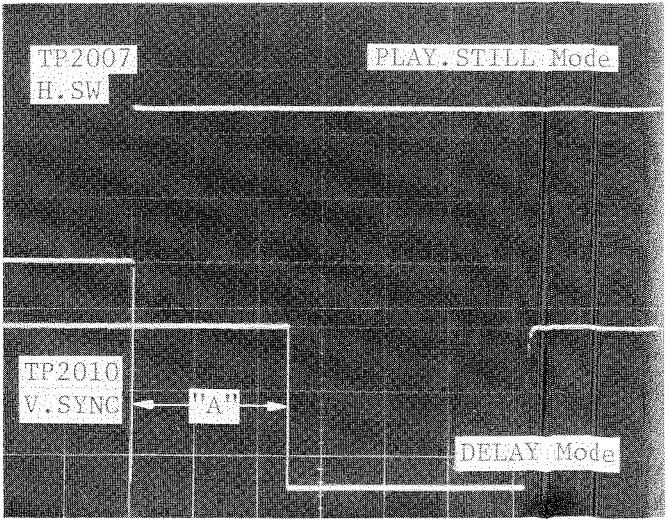


Fig. 22 TP2007 2V/0.1msec. div.(Trigger)
TP2010 2V/0.1msec. div.

2. Adjust R2085 for the period "B" as 144±25μsec.during CUE or REV mode as shown below.

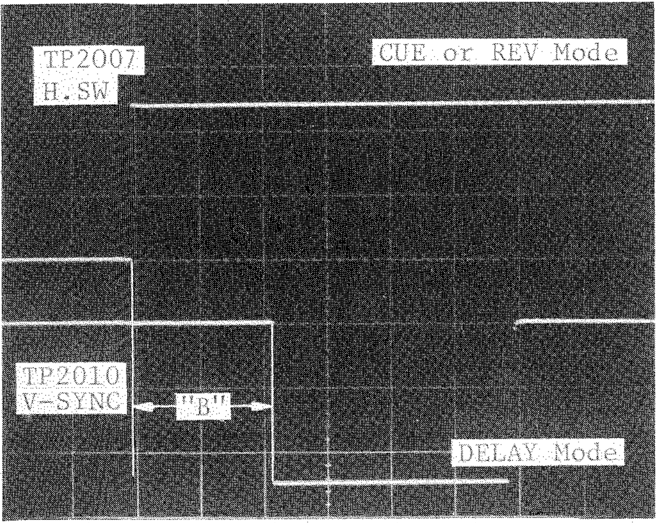


Fig. 23 TP2007 2V/50μsec.div.(Trigger)
TP2010 2V/50μsec.div.

LUMINANCE, CHROMINANCE & HEAD AMP SECTION

2-2-8. LUMINANCE RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3506(HOT) TP3505(GND)	R3521	REC.PLAY	VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	130±5mVp-p	

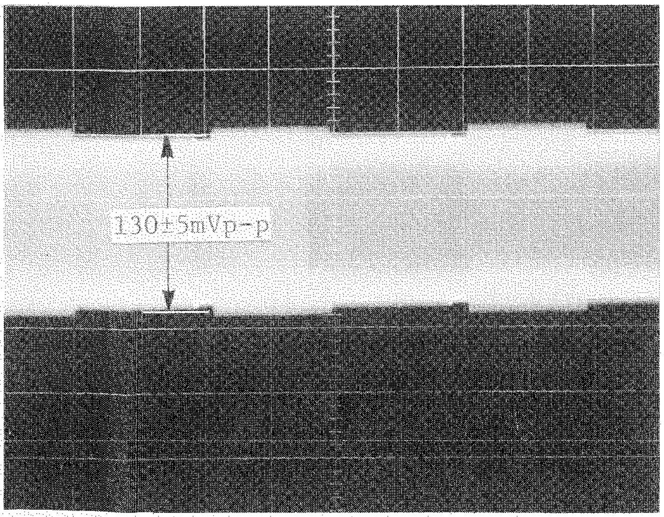


Fig. 24 TP3506 50mV/5msec.div.

2-2-9. CONFIRMATION OF CHROMINANCE REC. CURRENT

TP	ADJ.	MODE	INPUT
TP3506(HOT) TP3505(GND)		REC.PLAY	VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	28±2mVp-p	

1. Connect a jumper wire between TP3509 and GND.

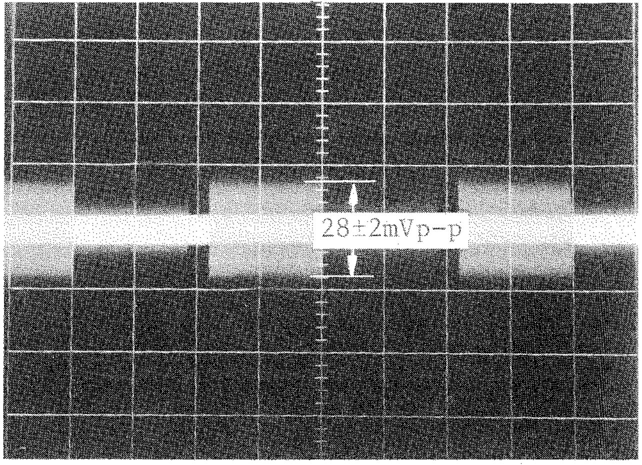


Fig. 25 TP3506 20mV/5msec.div.

2-2-10. VIDEO PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT	R3575	SELF RECORDING	VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	2.0±0.1Vp-p(Y-LEVEL) 1.1±0.15Vp-p(CYAN-LEVEL)	

1. Playback the just recorded portion.
2. Adjust R3575 for Y-level and confirm cyan level as shown below.

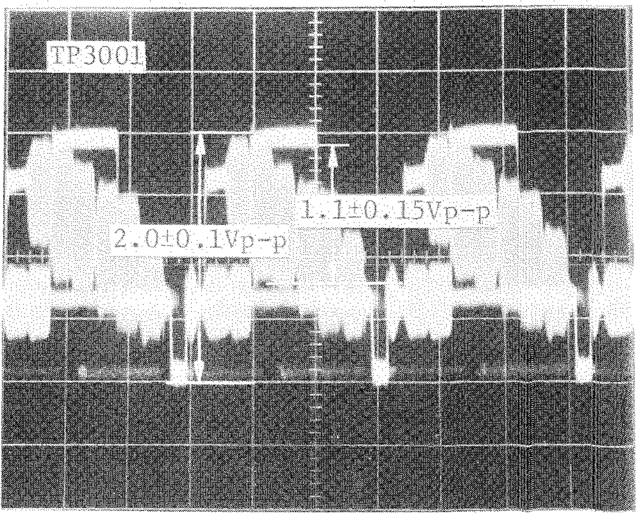


Fig. 26 TP3001 0.5V/20μsec.div.

2-2-11. LINE MUTUAL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3051	R3056	SELF RECORDING	VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE		

1. Playback the just Recorded portion.
2. Adjust R3056 so that the level of the sync tip to white peak becomes minimum as shown below.

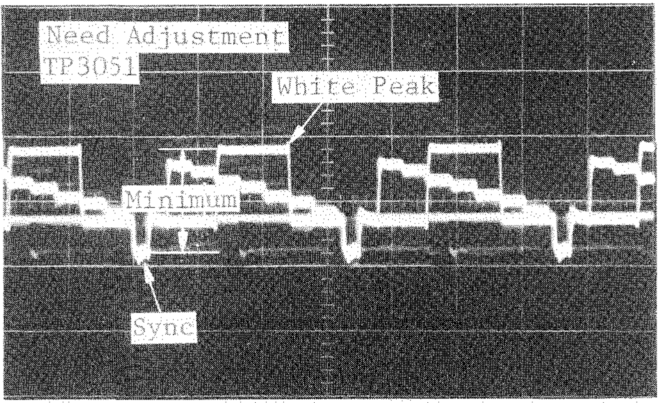


Fig. 27 TP3051 100mV/20μsec.div.

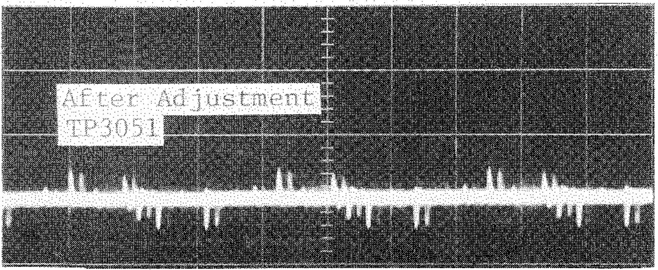


Fig. 28 TP3051 100mV/20μsec. div.

2-2-12. HEAD AMP PEAK FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3503	C3554,C3555, C3556,R3552, R3553,R3556	PLAY & PLAY. STILL	VIDEO SWEEP (TP3506, TP3508)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	VIF SWEEP OSCILLOSCOPE	2MHz:4.6MHz=1:3	

1. Set the sweep generator output to 100mVp-p at no load and set the marker output at 2MHz and 4.6MHz.

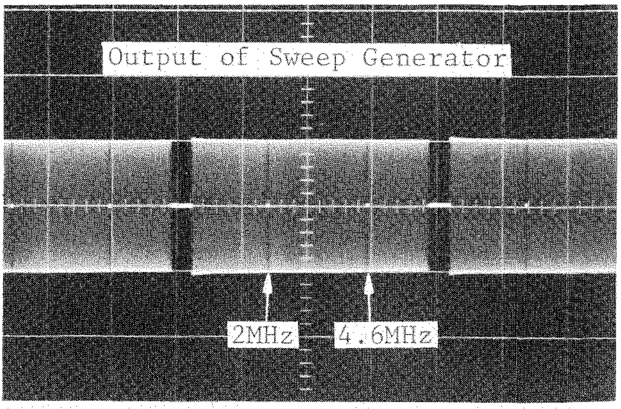


Fig. 29 20mV/5msec.div.

2. Supply sweep generator output to the TP3506 and TP3508 through the 30KΩ resistors as shown below.

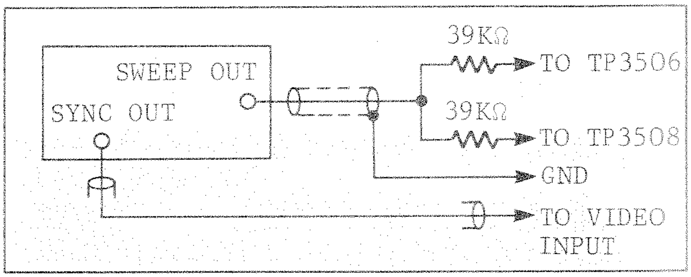

SWEEP OUT
SYNC OUT
39KΩ
TO TP3506
39KΩ
TO TP3508
GND
TO VIDEO INPUT

Fig. 30

3. Connect the oscilloscope to TP3503 through Filter Circuit as shown below.

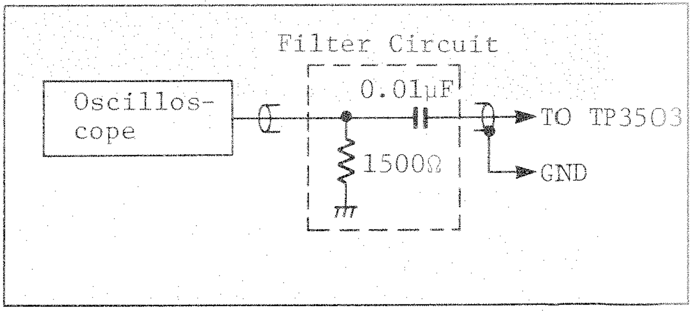

Filter Circuit
Oscillos-cope
0.01μF
1500Ω
TO TP3503
GND

Fig. 31

4. Adjust R3552 (Q-R) and R3556(Q-L) for the envelopes of both channels as shown below in PLAY mode.

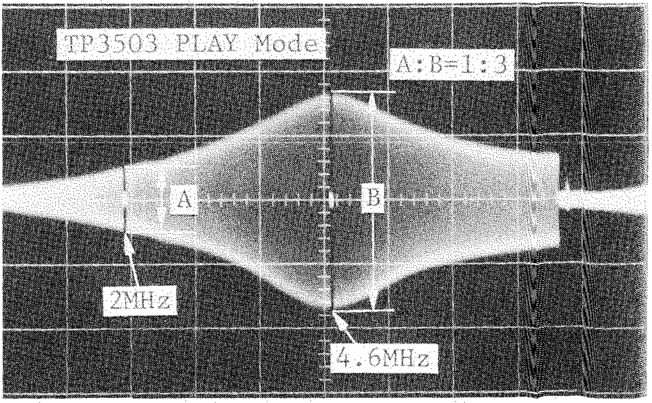


Fig. 32 TP3503 0.5V/2msec.div.

5. Adjust C3555 (PEAK-R) and C3556 (PEAK-L) so that the peak points become 4.6MHz as shown below in PLAY mode.

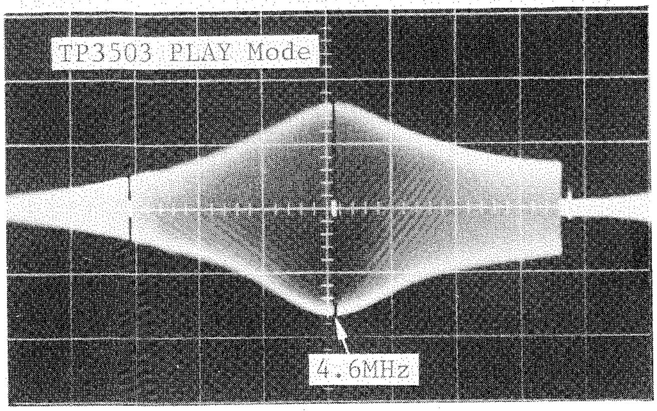


Fig. 33 TP3503 0.5V/2msec.div.

6. Adjust R3553 (Q-L') for the envelope as shown below in PLAY.STILL mode.

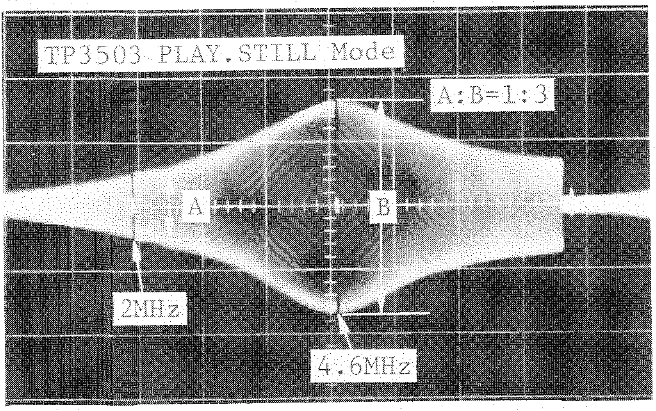


Fig. 34 TP3503 0.5V/2msec.div.

7. Adjust C3554 (PEAK-L') so that the peak point becomes 4.6MHz as shown below in PLAY.STILL mode.

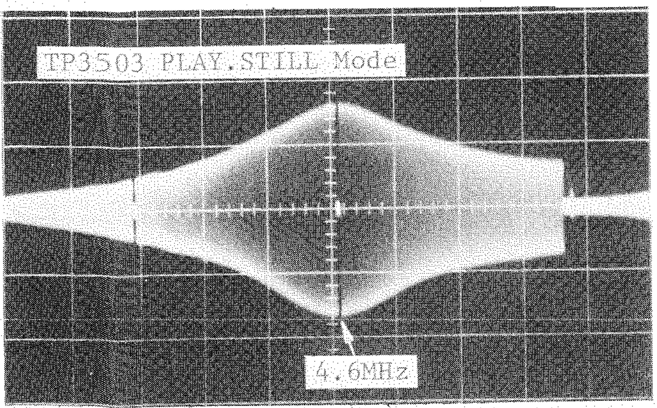


Fig. 35 TP3503 0.5V/2msec.div.

2-2-13. HEAD AMP FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3001	R3552 R3553 R3556	SELF RECORDING	VIDEO SWEEP

TAPE	M. EQ.	SPEC.
BLANK TAPE	VIDEO SWEEP, OSCILLOSCOPE	

1. Set the sweep generator output as shown below.

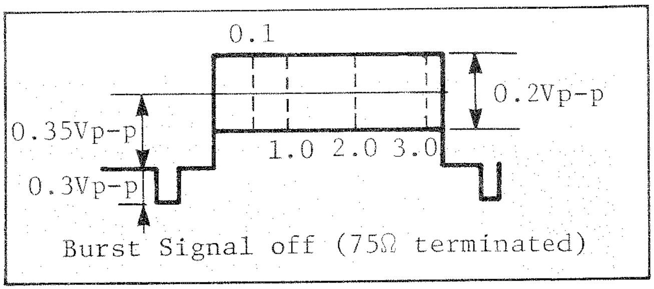


Fig. 36

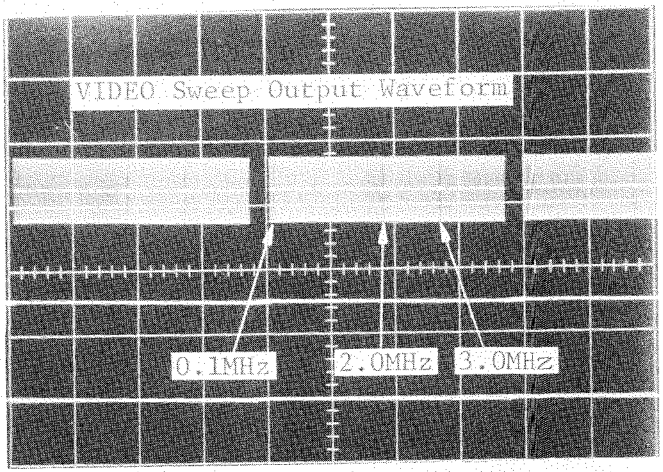


Fig. 37 0.2V/5msec.div.

2. PICTURE VR is center fix position.
3. Playback the just recorded portion.
4. Adjust R3552 and R3556 so that the waveforms become as shown below.

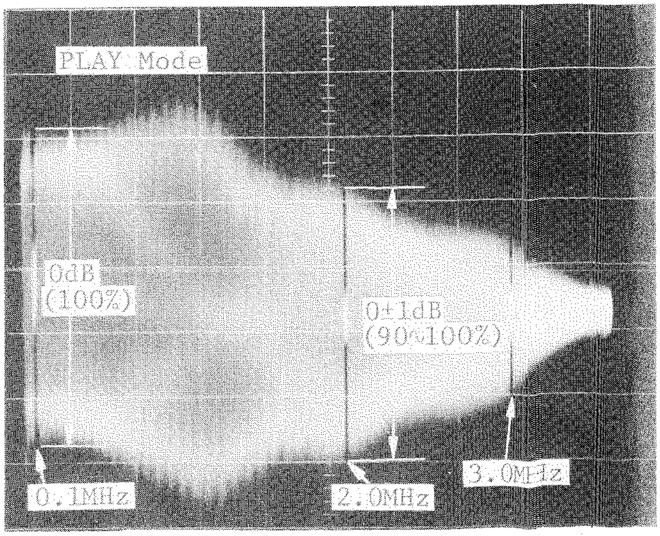


Fig. 38 TP3001 100mV/2msec.div.

2-2-14. SECAM KILLER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP8005	L8009	REC.PLAY	SECAM SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE		

1. Adjust L8009 so that the point "A" becomes minimum peak on the waveform as shown below.

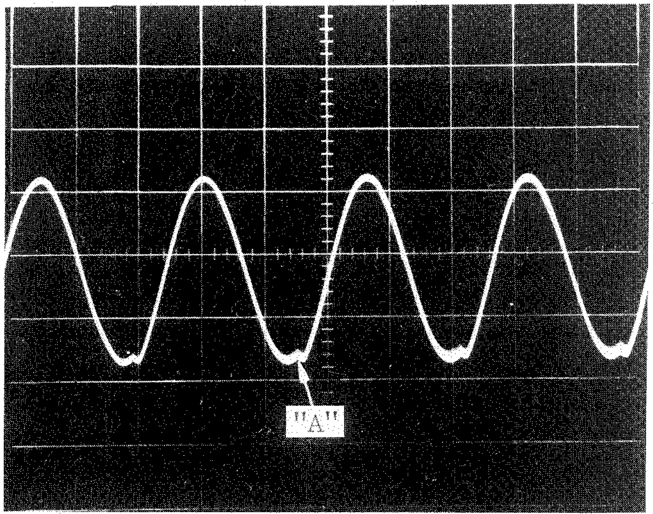


Fig. 39 TP8005 2V/50μsec.div.

AUDIO SECTION

2-2-15. AUDIO BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002(+) TP4003(-)	R4018	REC.PLAY	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	V.T.V.M.	4.0±0.1mVrms	

2-2-16. PLAYBACK AUDIO SW ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2007 TP2013	R2073	SELF RECORDING	1KHz,0dB
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	SIGNAL GENERATOR, OSCILLO-SCOPE	6.67±0.05ms.	

1. Set the Input Select SW of the deck to AUDIO mode.
2. Connect the signal Generator output to the both Input Jacks Ⓛ and Ⓡ.
3. Adjust R2073 for the period "T" becomes 6.67±0.05ms.
4. Confirm that the sounds on CH-1 and CH-2 do not contain beat noise.

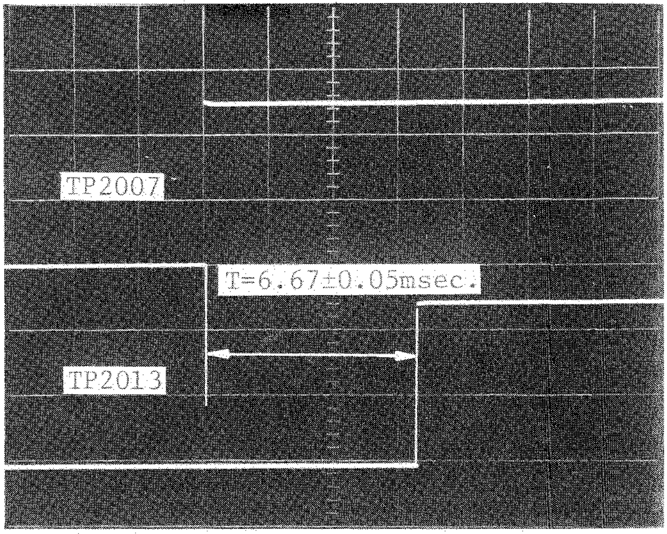


Fig. 40 TP2007 2V/2msec.div.(Trigger)
TP2013 2V/2msec.div.

2-2-17. AUDIO AGC CHANNEL BALANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT	R4329	STOP	1KHz,0dB
TAPE	**M. EQ.**	**SPEC.**	
	V.T.V.M.	400±60mVrms	

1. Set the mode select sw of the deck to the STEREO (Ch1+Ch2) mode and Recording level volume is AGC position.
2. Adjust R4329 so that the LINE OUT level is less than 0.5dB, compared with input level.
3. Confirm the E-E level for 400±600mVrms.

2-2-18. AUDIO RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4507(HOT) TP4508(GND)	R4612	REC.PLAY	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	250±10mVp-p	

2-2-19. FM AUDIO CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4504 TP4509	R4503 (CH-1) R4597 (CH-2)	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	1.4MHz±10KHz(CH-1) 1.8MHz±10KHz(CH-2)	

2-2-20. AUDIO DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4502(CH-1) TP4521(CH-2)	R4516 R4586	REC.PLAY	1KHz,0dB
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	SIGNAL GENERATOR D.V.M.	33±3mV-AC	

1. Adjust R4516 so that the CH-1 Audio deviation level becomes 33±3mV-AC.
2. Adjust R4586 so that the CH-2 Audio deviation level becomes 33±3mV-AC.

2-2-21. AUDIO RECORDING OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT	R4006 R4541 R4593	SELF RECORDING	1KHz,0dB AUDIO SIGNAL VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	V.T.V.M.		

1. Set the Recording level volume is AGC position.
2. Playback the just Recorded portion.
3. Adjust R4006 (P.B.LEV.) at the normal position of the sound track select button, R4541 (FM AUDIO: CH-1) and R4593 (FM AUDIO: CH-2) at the "L+R" position of the sound track select button, so that the Playback level is less than ±0.5dB, compared with E-E level in each mode (P.B.LEV., FM Audio CH-1 and 2).

2-2-22. NOISE REDUCTION TIMING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4505(HOT) TP4511(GND)	R4572	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	D.V.M.	15±0.15mV	

2-2-23. AUDIO MUTING ADJUSTMENT

TP	ADJ.	MODE	INPUT
	R4568	SELF RECORDING	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE			

1. Set the Hi-Fi sound SW to "L+R" mode and the Recording level volume is AGC position.
2. Playback the just Recorded portion.
3. Adjust the Tracking VR so that the Audio Tracking level becomes maximum.
4. First Re-adjust R4568 until the L+R indication on the Front panel turns OFF.
5. Then slowly adjust R4568 where the L+R indication just turns ON.
6. Confirm that the sounds on CH-1 and CH-2 do not contain abnormal sound.

OPERATION SECTION

2-2-24. OPERATION CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP6501	R6515	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	22.0±0.1KHz	

1. Disconnect the AC plug of the deck and connect a jumper wire between TP6502 and GND.
2. Connect the AC plug and Adjust R6515 for 22.0±0.1KHz as shown below.

TIMER & CHANNEL PRESET SECTION

2-2-25. TIMER RESET ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7501	R7509		
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE DC POWER SUPPLY	7.8msec	

1. Set the voltage of the DC POWER SUPPLY for 3.7±0.05V DC then connect the DC POWER SUPPLY to TP7504.
2. Adjust R7509 for 7.8msec. (128Hz) as shown below.

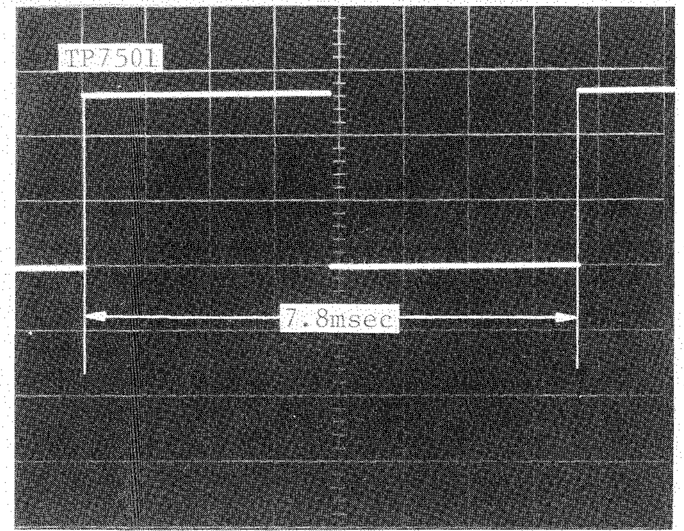


Fig. 41 TP7501 2V/1msec.div.

2-2-26. TIMER RESET VOLTAGE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7501	R7535		
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE DC POWER SUPPLY		

1. Connect a jumper wire between TP7504 and TP7505.
2. Set the voltage of the DC POWER SUPPLY for 4.6±0.05V and connect the DC POWER SUPPLY to TP7505.
3. Adjust R7535 for 62msec. (16Hz) as shown in Fig. 42.

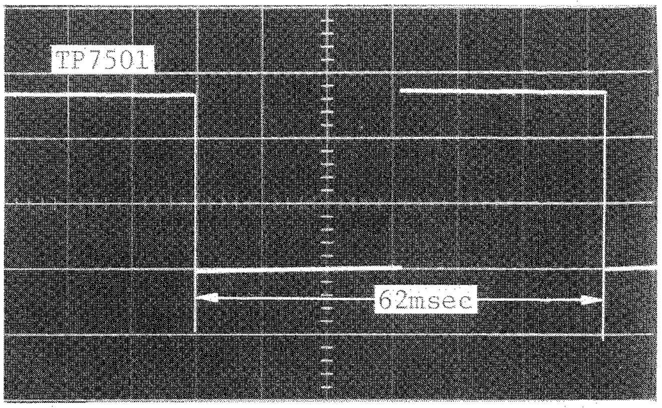


Fig. 42 TP7501 2V/10msec.div.

4. Set the Voltage of the DC POWER SUPPLY for 4.8±0.05V.
5. Confirm the frequency for 7.8msec(128Hz) as shown below.

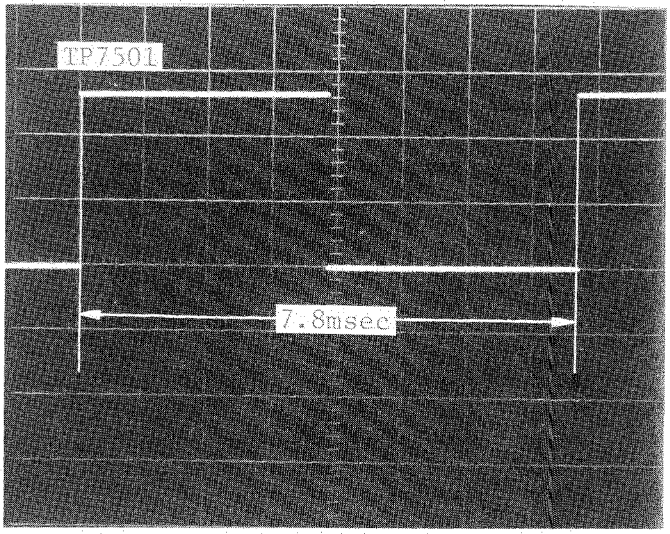


Fig.43 TP7501 2V/1msec.div.

2-2-27. TIMER CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7501	C7502		
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER	128Hz	

1. Set the voltage of the DC POWER SUPPLY for 6.0±0.1V and connect the DC POWER SUPPLY to P7502-6.
2. Adjust C7502 for 128Hz.

TV DEMODULATOR SECTION

Model No.: NV-850EG

2-2-28. TEST EQUIPMENTS

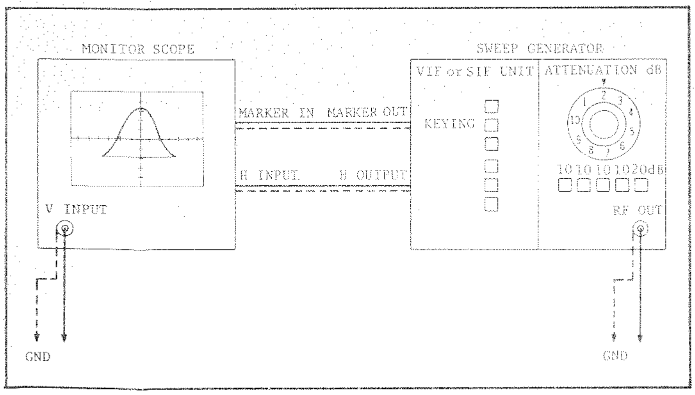
To make adjustment completely, following equipments are required.

1. VIF Sweep Generator with the Trap Adjustor 38.9MHz
2. CW Oscillator ......38.9MHz ±100KHz
3. Monitor Scope
4. Oscilloscope
5. Digital Volt Meter

2-2-29. SELECTIVE COIL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP714	T704 T705		VIF SWEEP
TAPE	M. EQ.	SPEC.	
	VIF SWEEP MONITOR SCOPE	A=1.0Vp-p B=38.9MHz	

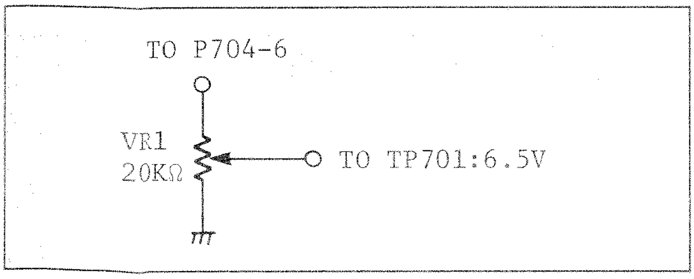
1. Connect a jumper between TP713 and GND.
2. Set the BAND SW of the deck to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuner becomes 15V.
3. Connect the VIF Sweep to TP711 and connect the Monitor Scope to TP714 as shown below.



MONITOR SCOPE
SWEEP GENERATOR
VIF or SIF UNIT
ATTENUATION dB
MARKER IN
MARKER OUT
KEYING
H INPUT
H OUTPUT
10 10 10 10 20dB
V INPUT
RF OUT
GND
GND

Fig. 44 Connection of Measuring Equipment

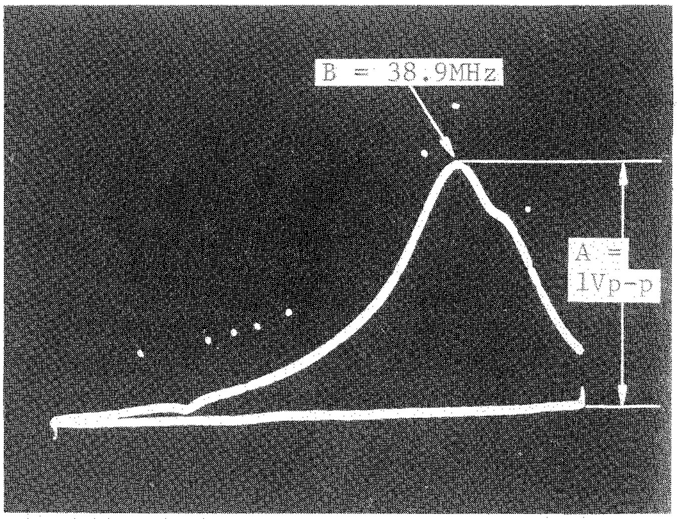
4. Connect the JIG to Both points TP701 and P704-6 as shown in Fig. 45.



TO P704-6
VR1
20KΩ
TO TP701:6.5V

Fig. 45

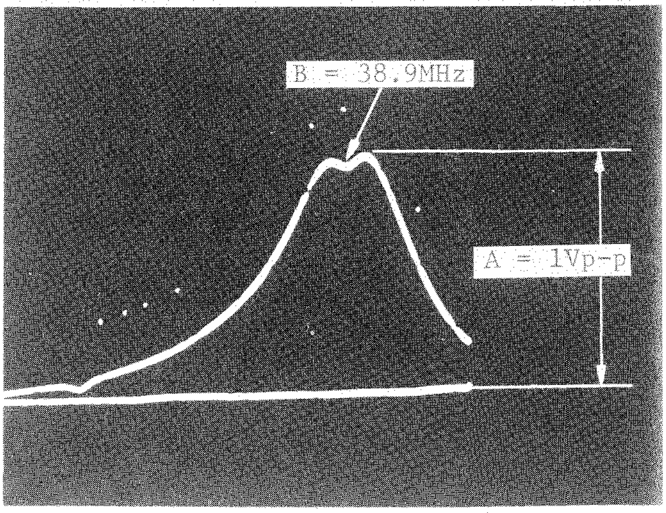
5. Adjust the VIF Sweep output so that the 1.0Vp-p.
6. Adjust T704 so that the 38.9MHz becomes peak point as shown below.



B = 38.9MHz
A = 1Vp-p

Fig. 46

7. Adjust T705 so that the marker port portion at 38.9MHz becomes as shown below.



B = 38.9MHz
A = 1Vp-p

Fig. 47

2-2-30. VIF SWEEP ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP714	T701 T702		VIF SWEEP
TAPE	M. EQ.	SPEC.	
	VIF SWEEP MONITOR SCOPE		

1. Connect a jumper between TP713 and GND.
2. Set the BAND SW to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuner becomes 15V.
3. Connect the VIF Sweep to Test Point of the Tuner and connect the Monitor Scope to TP714 as shown in Fig. 44.
4. Connect the 100Ω resistor between TP704 and TP705.
5. Adjust the VIF Sweep output so that the 1.0Vp-p.
6. Release 20dB attenuation from the attenuator of the VIF Sweep.
7. Adjust T702-B so that the 40.4MHz trap becomes minimum.
8. Adjust T701 so that the 31.9MHz trap becomes minimum.
9. Adjust T702-C so that the 33.4MHz trap becomes minimum.
10. Connect the JIG to both points P704-6 and TP701 as shown in Fig. 45.
11. Adjust the Tuner converter coil and T702-A so that the sweep output waveform becomes as follows.

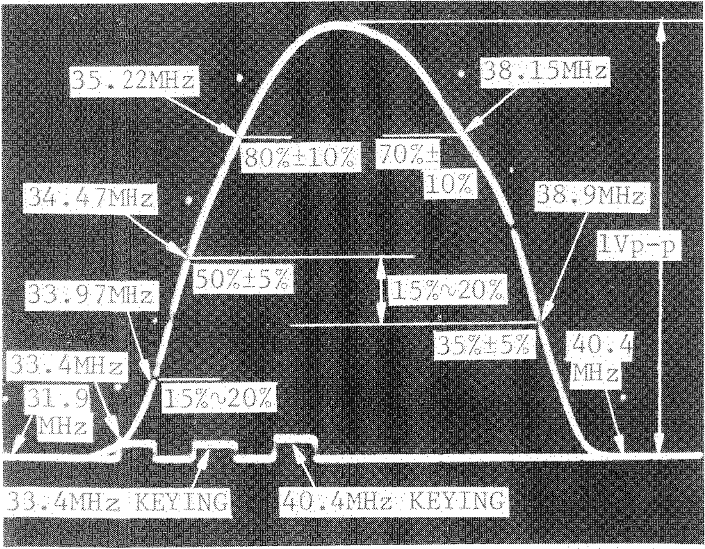


Fig. 48

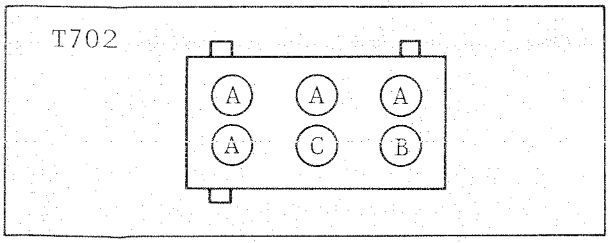


Fig. 49

2-2-31. AFC ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP703	T705		CW SIGNAL
TAPE	M. EQ.	SPEC.	
	D.V.M. CW OSCILLATOR	6.5V±0.3V	

1. Set the BAND SW to the VHF high position (VH), and turn the tuning volume so that the voltage at BT terminal of the tuner becomes 15V.
2. Set the CW Oscillator output to 38.9 MHz 1Vp-p and connect the CW Oscillator output to the Tuner Test point.
3. Connect the D.V.M. to TP703.
4. Confirm the reading "A" of the D.V.M. is 6.5V, when the AFC switch is off.
5. Set the AFC switch to "ON" and adjust T705 for "6.5V±0.3V".
6. Change the frequency of the CW Oscillator ±100KHz, centered at 38.9MHz and confirm that the difference of the AFC voltage is more than ±3V.

2-2-32. CARRIER TRANSFORMER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP707	T707 T706 T712		VIF SWEEP
TAPE	M. EQ.	SPEC.	
	VIF SWEEP MONITOR SCOPE		

1. Set the BAND SW to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuner becomes 15V.
2. Connect a jumer between TP713 and GND.
3. Connect the VIF Sweep output to Tuner Test Point and connect the Monitor Scope to TP707.
4. Adjust the VIF Sweep output so that the level of it becomes 1.0Vp-p.
5. Release 20dB attenuation from the attenuator of the VIF Sweep.
6. Connect the JIG to both points TP701 and P704-6 as shown in Fig. 45 and adjust the VR1 so that the level of it becomes 1.0 Vp-p.
7. Adjust T707 so that the marker portion at 38.9MHz is peak of the wave as shown next page.

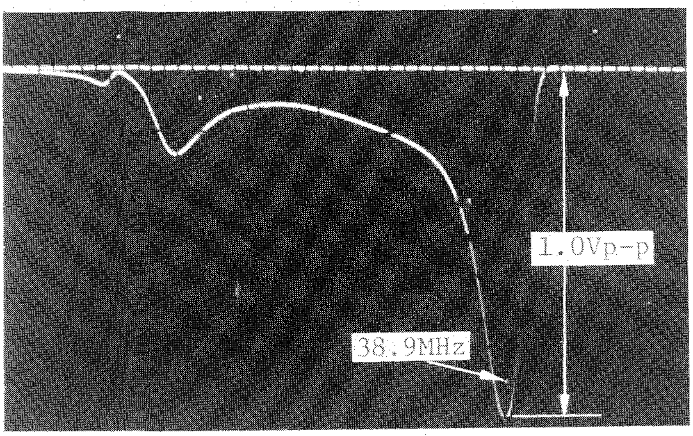


Fig. 50

8. Connect the 100Ω resistor between TP708 and TP709 and remove the JIG.
9. Adjust the output of the VIF Sweep Generator so that the level of waveform becomes 1.0Vp-p.
10. Release 20dB attenuation from the attenuator of the VIF Sweep and connect the JIG.
11. Adjust the VR1 so that the level of waveform becomes 1.0Vp-p.
12. Adjust T706-B so that the 40.4MHz trap becomes minimum.
13. Adjust T706-C so that the 31.9MHz trap becomes minimum.
14. Adjust T712 so that the trap becomes at 33.4MHz portion of the VIF waveform as shown below.
15. Adjust T706-A1, T706-A2, T706-A3 and T706-A4 so that the waveform becomes as shown below.

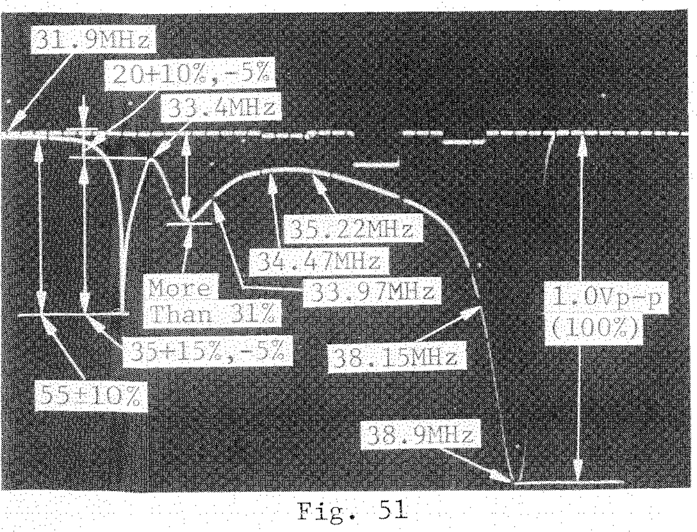


Fig. 51

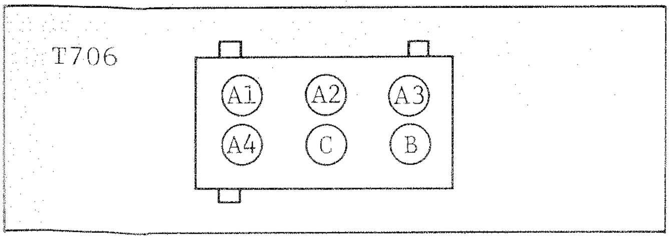


Fig. 52

2-2-33. BURST LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP702	R736		RF COLOUR BAR SIGNAL
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	240mV±10mVp-p	

1. Set the BAND SW to High Position
2. Tune in the VHF RF Colour Bar signal.
3. Adjust R736 so that the burst level becomes 240mV±10mVp-p.

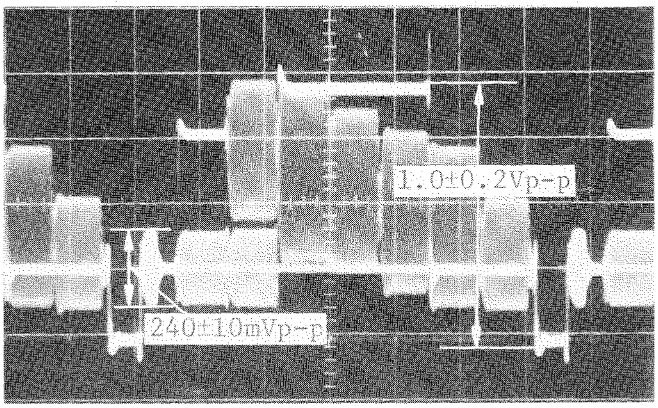


Fig. 53

TV DEMODULATOR SECTION

Model No.: NV-850E

2-2-34. TEST EQUIPMENTS

To make adjustments completely, following equipments are required.

1. VIF Sweep Generator with the Trap Adjustor 38.9MHz
2. SIF Sweep Generator .... 5.5MHz ± 150KHz
3. CW Oscillator ..... 38.9MHz ± 100KHz
4. Digital Volt Meter
5. Oscilloscope
6. Monitor Scope

2-2-35. SELECTIVE COIL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP707	T703 T704		VIF SWEEP
TAPE	M. EQ.	SPEC.	
	VIF SWEEP MONITOR SCOPE	A=2.0Vp-p B=38.9MHz	

1. Set the BAND SW of the deck to the VHF high position(VH) and turn the tuning volume so that the voltage at BT terminal of the tuner becomes 15V.
2. Connect the VIF Sweep to TP703 and connect the Monitor Scope to TP707 as shown in Fig. 44.

3. Connect the JIG to both points P704-6 and TP701 as shown in Fig. 54 and adjust VR1 so that the Sweep output becomes 2.0Vp-p.
4. Adjust T703 so that the 38.9MHz becomes peak point as shown in Fig. 55.

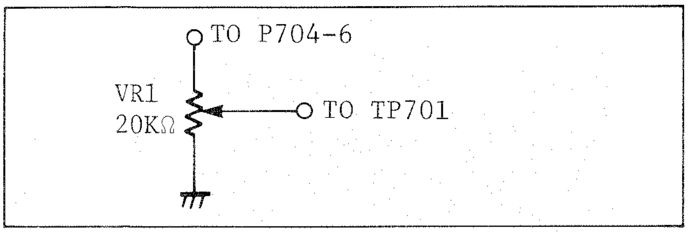


Fig. 54

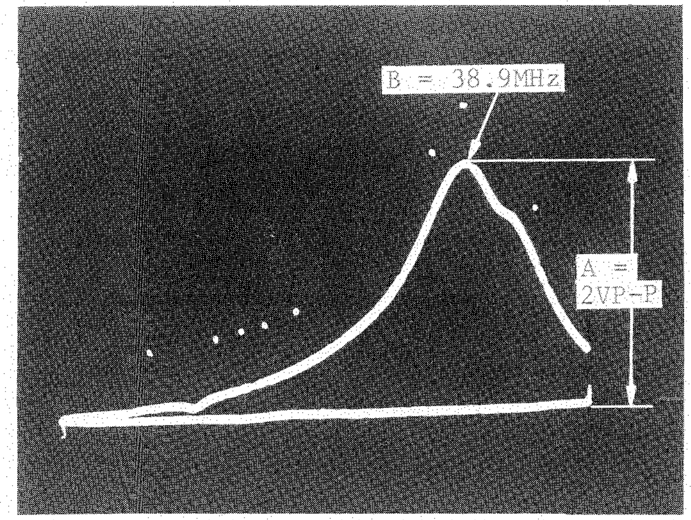


Fig. 55

5. Adjust T704 so that the marker portion at 38.9MHz becomes as shown below.

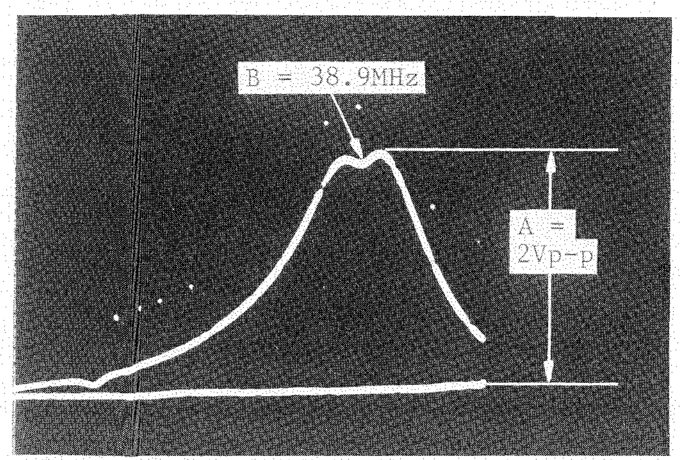


Fig. 56

2-2-36. VIF SWEEP ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP707	T701 T702		VIF SWEEP
TAPE	**M. EQ.**	**SPEC.**	
	VIF SWEEP MONITOR SCOPE		

1. Set the BAND SW to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuning becomes 15V.
2. Connect the VIF Sweep to Test Point of the Tuner and connect the Monitor Scope to TP707 as shown in Fig. 44.
3. Connect a jumper between TP701 and GND.
4. Connect the 100Ω resistor between TP704 and TP705.
5. Adjust the VIF Sweep output so that the 1.0Vp-p.
6. Release 20dB attenuation from the attenuator of the VIF Sweep.
7. Connect the JIG to both points P704-6 and TP709 as shown in Fig. 54 and adjust VR1 so that the Sweep output becomes 1.0Vp-p.
8. Adjust T702 so that the 33.4MHz trap becomes minimum.
9. Adjust T701 so that the 40.4MHz trap becomes minimum.
10. Adjust the Tuner converter coil and T701 so that the sweep output waveform becomes as follows.

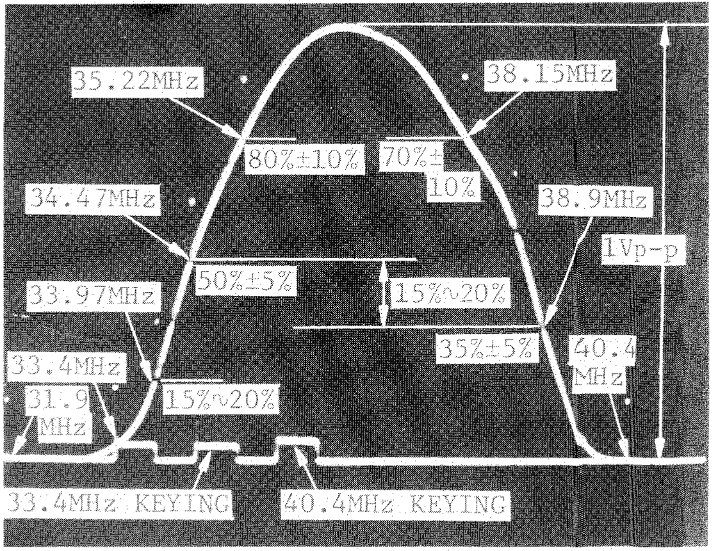
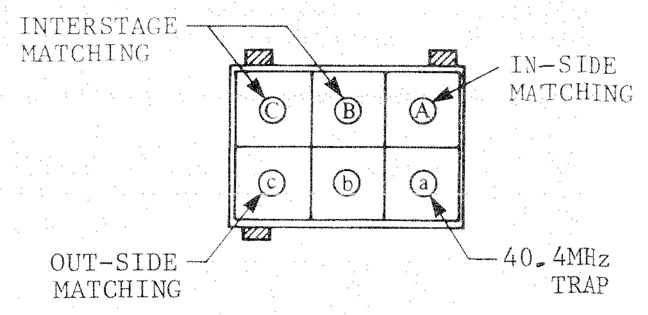


Fig. 57



* B coil for Interstage Matching is preset, so the adjustment is not required normally.

Fig. 58 HLB Transformer T701

2-2-37. SIF SWEEP ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP710	T751 T752		SIF SWEEP
TAPE	**M. EQ.**	**SPEC.**	
	SIF SWEEP D.V.M. MONITOR SCOPE		

1. Set the BAND SW to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuning becomes 15V.
2. Connect the JIG to both points P704-6 and TP701 and Adjust the VR1 to 4V.
3. Adjust the SIF Sweep output to 700mVp-p (75Ω open).
4. Connect the sweep to TP706 and connect the Monitor Scope to TP710.
5. Turn R755 fully maximum.
6. Adjust T752 so that the attenuation of 5.5MHz trap becomes minimum.
7. Adjust T751 for maximum peak-to-peak amplitude of response "S" curve as shown below.

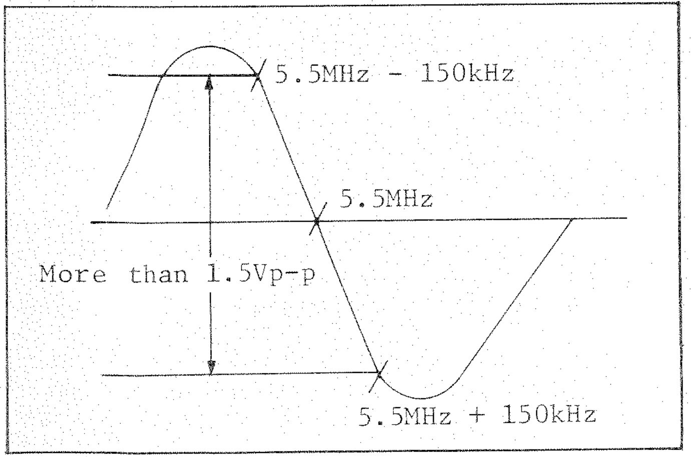


Fig. 59 SIF Waveform

8. Confirm that the level between the 150KHz marker position is more than 1.5Vp-p.

2-2-38. AFC ADJUSTMENT

TP	ADJ.	MODE	INPUT
TUNER TP TP702	T704		CW OSC
TAPE	**M. EQ.**	**SPEC.**	
	CW OSCI-LLATOR D.V.M.	A±0.3V	

1. Set the BAND SW to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuning becomes 15V.
2. Set the CW oscillator so that the 38.9 MHz CW signal becomes 1Vp-p.
3. Supply this signal to the Tuner Test Point.
4. Connect the Digital Voltmeter to the Tuner AFC terminal TP702.
5. Confirm the reading of the D.V.M., "A" is between 6.4V and 6.8V, when the AFC switch is off.
6. Set the AFC switch is "ON".
7. Adjust T704 so that the level at the Tuner AFC terminal TP702 becomes "A ±0.3V".
8. Change the frequency of the CW oscillator ±100KHz, centered at 38.9MHz and confirm that the difference of the AFC voltage is more than ±3V.

2-2-39. BURST LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP711	R728		RF COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	240mVp-p	

1. Set the BAND SW to High Position.
2. Tune in the VHF RF Colour Bar Signal.
3. Adjust R728 so that the burst level becomes 240mV ± 10mVp-p.

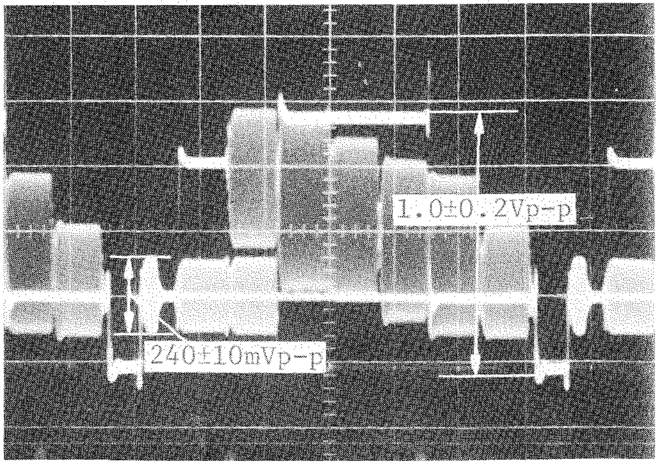


Fig. 60

TV DEMODULATOR SECTION

Model No.: NV-850B

2-2-40. TEST EQUIPMENTS

To make adjustments completelu, following equipments are required.

1. VIF Sweep Generator with the Trap Adjustor 39.5MHz
2. SIF Sweep Generator .... 6.0MHz ± 150KHz
3. CW Oscillator ..... 39.5MHz ± 100KHz
4. Digital Volt Meter
5. Oscilloscope
6. Monitor Scope

2-2-41. SELECTIVE COIL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP707	T703 T704		VIF SWEEP
TAPE	M. EQ.	SPEC.	
	VIF SWEEP MONITOR SCOPE	A=2.0Vp-p B=39.5MHz	

1. Set the BAND SW of the deck to the VHF high position(VH) and turn the tuning volume so that the voltage at BT terminal of the tuner becomes 15V.
2. Connect the VIF Sweep to TP703 and conect the Monitor Scope to TP707 as shown in Fig. 44.
3. Connect the JIG to both points P704-6 and TP701 as shown Fig. 61 and adjust VR1 so that the Sweep output becomes 2.0Vp-p.
4. Adjust T703 so that the 39.5MHz becomes peak point as shown below.

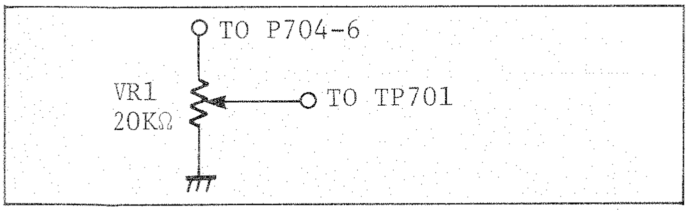


Fig. 61

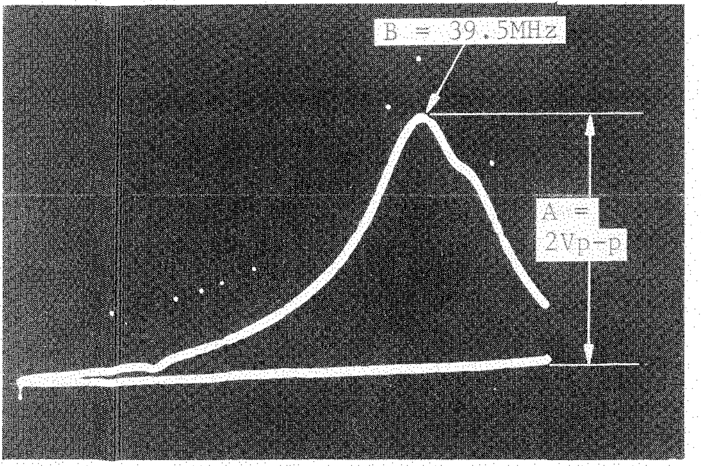


Fig. 62

5. Adjust T704 so that the marker portion at 39.5MHz becomes as shown below.

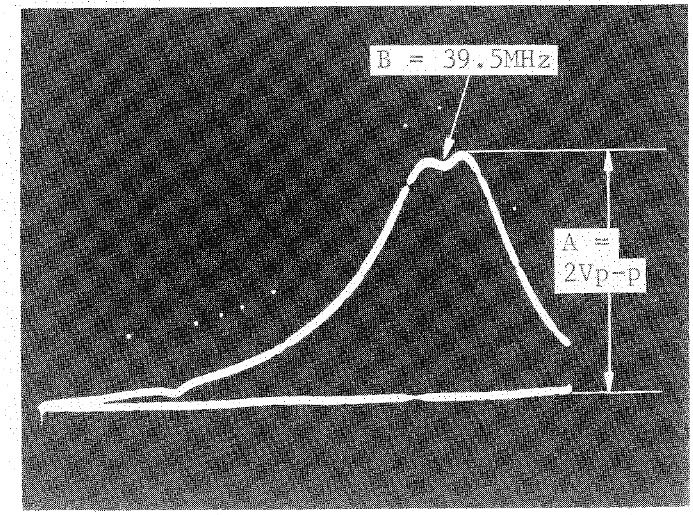


Fig. 63

2-2-42. VIF SWEEP ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP707	T701 T702		VIF SWEEP
TAPE	M. EQ.	SPEC.	
	VIF SWEEP MONITOR SCOPE		

1. Set the BAND SW to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuning becomes 15V.
2. Connect the VIF Sweep to Test Point of the Tuner and connect the Monitor Scope to TP707 as shown in Fig. 44.
3. Connect a jumper between TP701 and GND.
4. Connect the 100Ω resistor between TP704 and TP705.
5. Adjust the VIF Sweep output so that the 1.0Vp-p.
6. Release 20dB attenuation from the attenuator of the VIF Sweep.
7. Connect the JIG to both points P704-6 and TP709 as shown in Fig. 54 and adjust VR1 so that the Sweep output becomes 1.0Vp-p.
8. Adjust T702 so that the 31.5MHz trap becomes minimum.
9. Adjust T701 so that the 41.5MHz trap becomes minimum.
10. Adjust the Tuner converter coil and T701 so that the sweep output waveform becomes as follows.

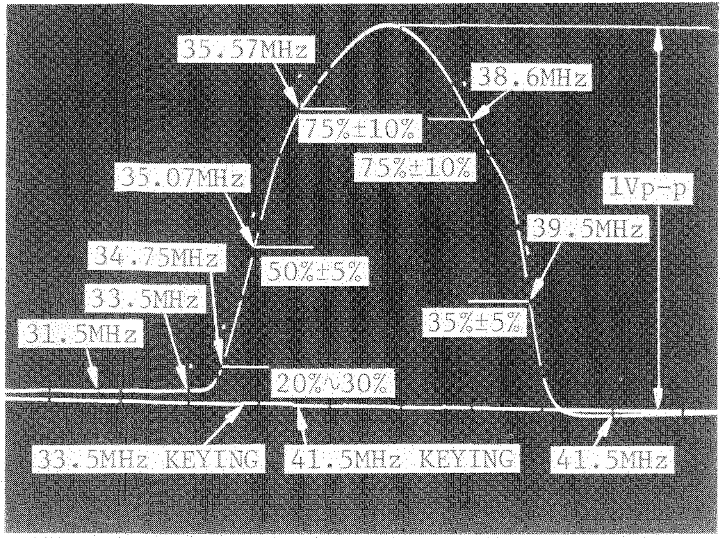
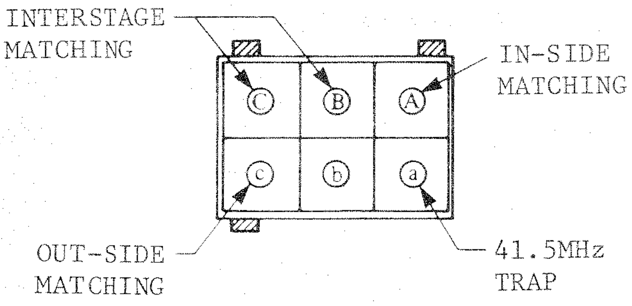


Fig. 64



* B coil for Interstage Matching is preset, so the adjustment is not required normally.

Fig. 65 HLB Transformer T701

2-2-43. SIF SWEEP ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP710	T751 T752		SIF SWEEP
TAPE	**M. EQ.**	**SPEC.**	
	SIF SWEEP D.V.M. MONITOR SCOPE		

1. Set the BAND SW to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuning becomes 15V.
2. Connect the JIG to both points P704-6 and TP709 and adjust the VR1 to 4V.
3. Adjust the SIF Sweep output to 700mVp-p (75Ω open).
4. Connect the sweep to TP706 and Connect the Monitor Scope to TP710.
5. Turn R755 fully maximum.
6. Adjust T752 so that the attenuation of 6.0MHz trap becomes minimum.
7. Adjust T751 for maximum peak-to-peak amplitude of response "S" curve as shown below.

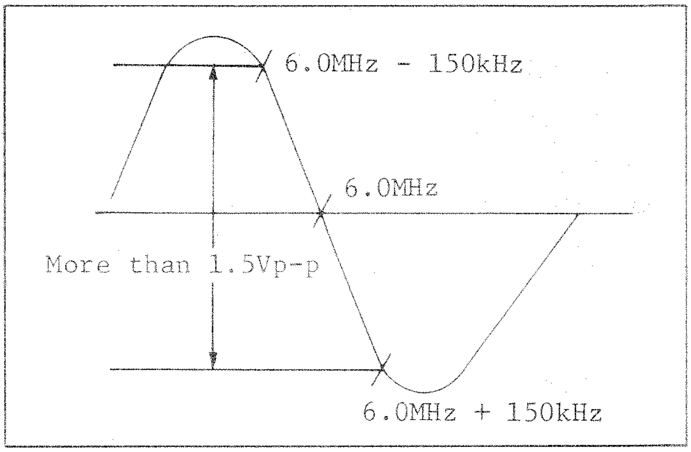


Fig. 66 SIF Waveform

8. Confirm that the level between the 150kHz marker position is more htan 1.5 Vp-p.

2-2-44. AFC ADJUSTMENT

TP	ADJ.	MODE	INPUT
TUNER TP TP702	T704		CW OSC
TAPE	**M. EQ.**	**SPEC.**	
	CW OSCILLA- TOR D.V.M.	A ± 0.3V	

1. Set the BAND SW to the VHF high position (VH) and turn the tuning volume so that the voltage at BT terminal of the tuning becomes 15V.
2. Set the CW oscillator so that the 39.5MHz CW signal becomes 1Vp-p.
3. Supply this signal to the Tuner Test Point.
4. Connect the Digital Voltmeter to the Tuner AFC terminal TP702.
5. Confirm the reading of the D.V.M., "A" is between 6.5V and 6.8V, when the AFC switch is off.
6. Set the AFC switch is "ON".
7. Adjust T704 so that the level at the Tuner AFC terminal TP702 becomes "A ±0.3V".
8. Change the frequency of the CW oscillator ±100KHz, centered at 39.5 MHz and confirm that the difference of the AFC voltage is more than ±3V.

2-2-45. BURST LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP711	R728		RF COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	240mVp-p	

1. Set the BAND SW to High Position.
2. Tune in the VHF RF Colour Bar signal.
3. Adjust R728 so that the burst level becomes 240mV ± 10mVp-p.

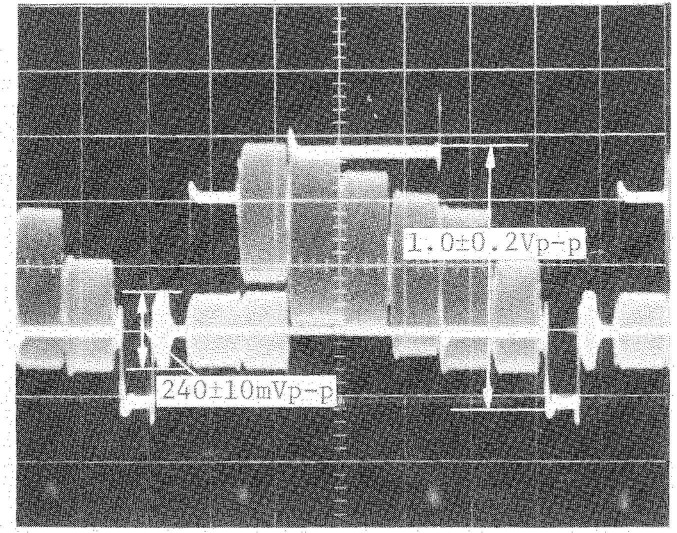


Fig. 67

DECODER SECTION

Model No.: NV-850EG

2-2-46. TEST EQUIPMENTS

To make adjustment completely, following equipments are required.

1. Digital Volt Meter (D.V.M)
2. Oscilloscope
3. Multi Voice Mdlulator (M.V.M)
4. Frequency counter (F. Counter)
5. Noise Meter
6. B.P.F (1KHz)

2-2-47. PLL OSCILLATION FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7003 TP7004	R7026 R7028		
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	234.0±2.0Hz 547.2±2.0Hz	

1. Don't supply any RF signal to RF input.
2. Set the AFC switch to "OFF".
3. Connect the jumper wire between TP706 and the GND.
4. Connect the Frequency counter to TP7003 and adjust R7026 for 234.0 ±2.0Hz.
5. Connect the Frequency Counter to TP7004 and adjust R7028 for 547.2 ±2.0Hz.

2-2-48. FM DETECTION TRANSFORMER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7013 TP7011	T7002 T7003		M.V.M.
TAPE	**M. EQ.**	**SPEC.**	
	M.V.M. OSCILLO-SCOPE		

1. Supply a video signal to the input of the Multi Voice Modulator.
2. Connect the output of the Multi Voice Modulator to RF Input.
3. Set the channel to CH10.
4. Set the AFC switch to "ON" and set the Mode selection switch to "CH1+2" position.
5. Connect the oscilloscope to TP7013.
6. Adjust T7002 so that the output level indication on the oscilloscope becomes maximum, more than 400mVp-p.
7. Connect the oscilloscope to TP7011.
8. Adjust T7003 so that the output level indication on the oscilloscope becomes maximum, more than 400mVp-p.

2-2-49. STEREO SEPARATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7008	R7001		M.V.M.
TAPE	**M. EQ.**	**SPEC.**	
	M.V.M NOISE METER		

1. Supply a video signal to the input of the Multi Voice Modulator.
2. Connect the output of the Multi Voice Modulator to RF Input.
3. Set the channel to CH10 and Set the AFC switch to "ON".

4. Tune the Output Frequency of the Multi Voice Modulator for CH10 of the deck and place the mode selection switch to "CH1 +2" position.
5. Connect the Noise Meter to TP7008 through the B.P.F(1KHz).
6. Adjust R7001 so that the indication of the Noise Meter becomes minimum.

2-2-50. PILOT SIGNAL TRANSFORMER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7005	T7001		M.V.M.
TAPE	**M. EQ.**	**SPEC.**	
	M.V.M OSCILLO-SCOPE		

1. Supply a video signal to the input of the Multi Voice Modulator.
2. Connect the output of the Multi Voice Molulator to RF Input.
3. Set the Channel to CH10 and set the AFC switch to "ON".
4. Tune the output frequency of the multi Voice Modulator for CH10 of the deck and place the mode selection switch to "CH1+2" position.
5. Connect the oscilloscope to TP7005.
6. Adjust T7001 so that the level of the waveform becomes maximum and also DC level of the waveform becomes maximum.

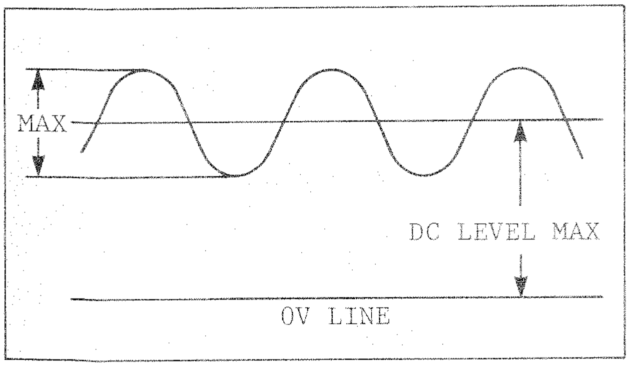


Fig. 68

2-2-51. AUDIO OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7008 TP7009	R7044 R7040		M.V.M.
TAPE	**M. EQ.**	**SPEC.**	
	M.V.M. NOISE METER	100±5mVrms	

1. Supply a video signal to the Input of the Multi Voice Modulator.
2. Connect the output of the Multi Voice Modulator to RF Input.
3. Set the Channel to CH10 and set the AFC Switch to "ON".
4. Tune the output frequency of the Multi Voice Modulator for CH10 of the deck and place the mode selection switch to CH1+2.
5. Connect the Noise Meter to TP7008.
6. Adjust R7044 so that indication of the Noise Meter becomes 100±5mVrms.
7. Connect the noise Meter to TP7009.
8. Adjust R7040 so that indication of the Noise Meter becomes 100±5mVrms.

2-2-52. MAIN AUDIO OUTPUT LEVEL

TP	ADJ.	MODE	INPUT
TP7002	R7076		M.V.M.
TAPE	**M. EQ.**	**SPEC.**	
	M.V.M. NOISE METER	85±5mVrms	

1. Supply a video signal to the input of Mult Voice Modulator
2. Set the Mult Voice Modulation mode of Multi Voice Modulator to DUAL M1.
3. Connect the output of the Multi Voice Molulator to RF Input.
4. Set the AFC Switch to "ON".
5. Connect the Noise Meter to TP7002.
6. Adjust R7076 so that the indication of the Noise Meter becomes within 85 ± 5mVrms.

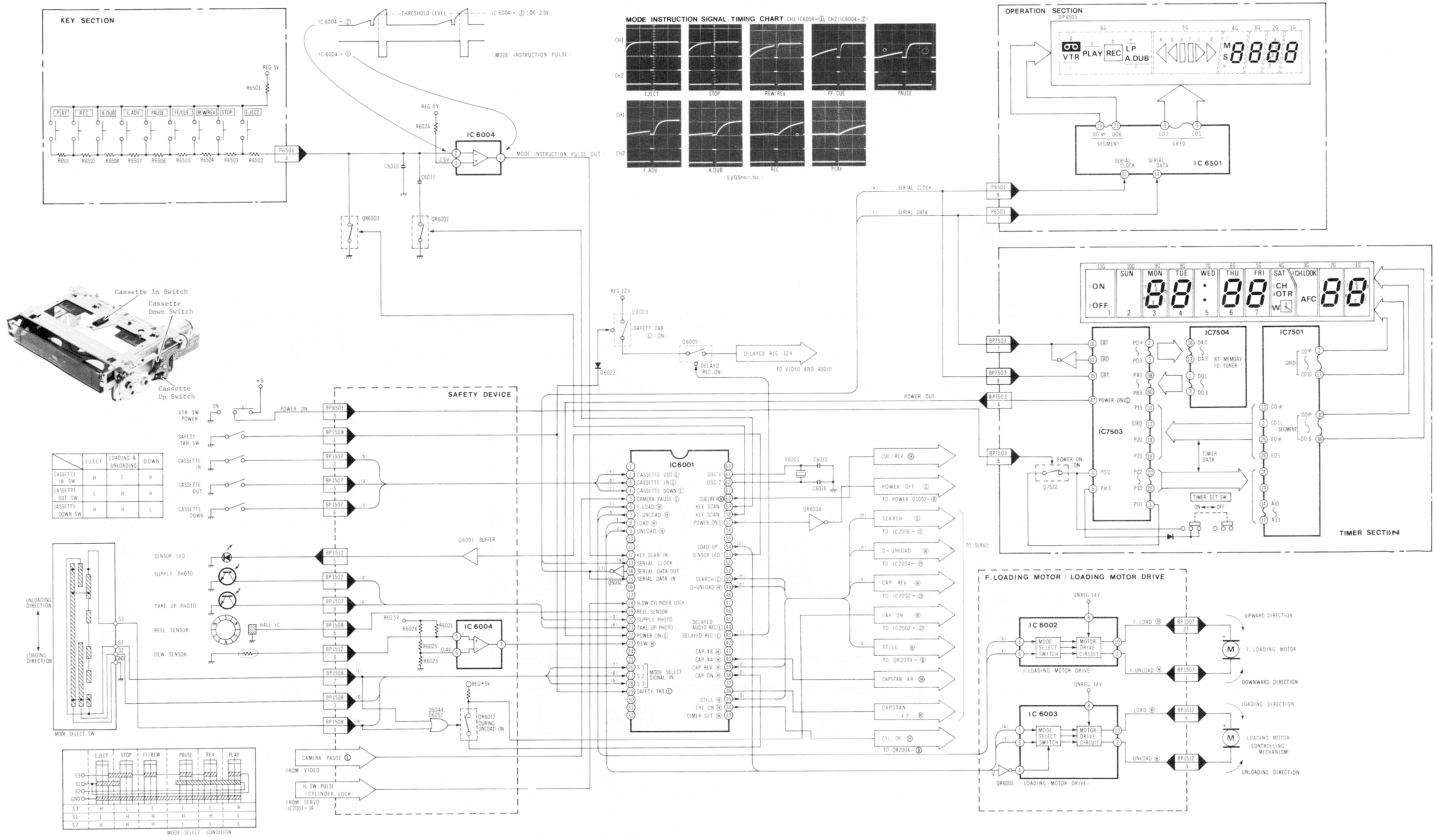
2-2-53. BUZZ ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7009	T707		M.V.M.
TAPE	**M. EQ.**	**SPEC.**	
	M.V.M. NOISE METER	LESS THAN 300μVrms	

1. Supply a Video Signal to the input of the Multi Voice Modulator.
2. Set the Multi Voice Modulation Mode of Multi Voice Modulator to SINGLE M2, and turn Voice modulation to "OFF" and set the AFC Switch to "ON".
3. Connect the Noise Meter to TP7009.
4. Adjust T707 so that the indication of the Noise Meter becomes minimum.

SECTION-3
BLOCK AND SCHEMATIC DIAGRAM

3-1. SYSTEM CONTROL BLOCK DIAGRAM

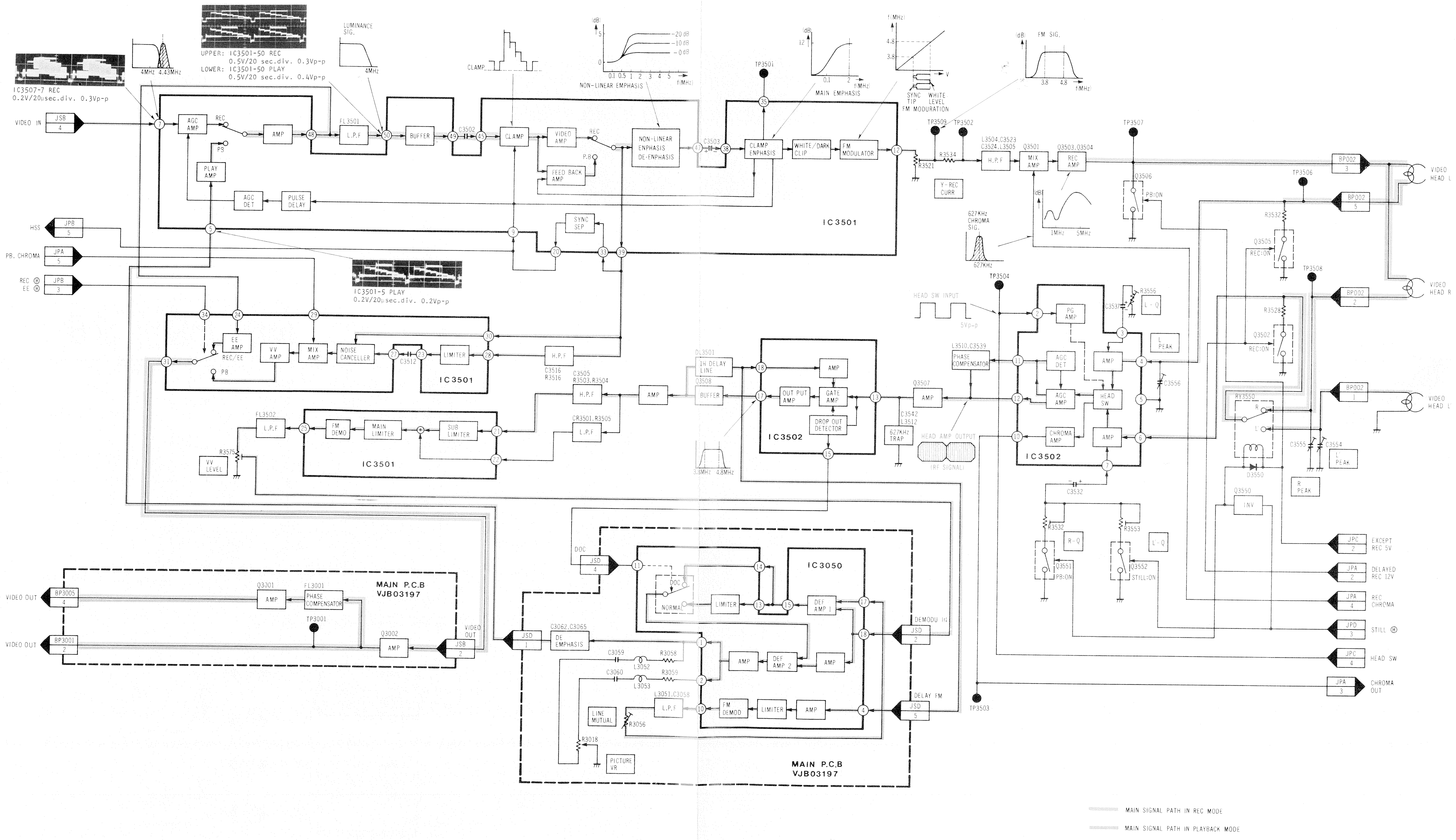

KEY SECTION
PLAY
REC
A.DUB
F.ADV
PAUSE
FF/CUE
REW/REV
STOP
EJECT
REG 5V
R6501
R6511
R6510
R6508
R6507
R6506
R6505
R6504
R6503
R6502
P6501
IC6004
REG 5V
R6024
C6010
C6011
QR6003
QR6002
MODE INSTRUCTION PULSE OUT
THRESHOLD LEVEL
IC6004 - ③ : DC 2.5V
IC6004 - ②
IC6004 - ①
MODE INSTRUCTION PULSE
MODE INSTRUCTION SIGNAL TIMING CHART (CH1: IC6004-①, CH2: IC6004-②)
CH1
CH2
EJECT
STOP
REW/REV
FF/CUE
PAUSE
F.ADV
A.DUB
REC
PLAY
(5V/0.5msec.div.)
OPERATION SECTION
DP6501
VTR
PLAY
REC
LP
A.DUB
M
S
SEGMENT
GRID
SERIAL CLOCK
SERIAL DATA
IC6501
SERIAL CLOCK
SERIAL DATA
Cassette In Switch
Cassette Down Switch
Cassette Up Switch
REG 12V
Q6003
SAFETY TAB (L : ON)
Q6005
DELAYED REC 12V
DELAYD REC : ON
TO VIDEO AND AUDIO
D6022
SAFETY DEVICE
VTR SW (POWER)
POWER ON
SAFETY TAB SW
CASSETTE IN
CASSETTE OUT
CASSETTE DOWN
SENSOR LED
SUPPLY PHOTO
TAKE UP PHOTO
REEL SENSOR
HALL IC
DEW SENSOR
Q6001 BUFFER
IC6004
R6021
R6025
R6023
D6044, D6052
QR6012 DURING UNLOAD ON
REG +5V
CAMERA PAUSE (L)
FROM VIDEO
H. SW PULSE (CYLINDER LOCK)
FROM SERVO (IC2003-14)
UNLOADING DIRECTION
LOADING DIRECTION
MODE SELECT SW
IC6001
CASSETTE OUT (L)
CASSETTE IN (L)
CASSETTE DOWN (L)
CAMERA PAUSE (L)
F.LOAD (H)
F.UNLOAD (H)
LOAD (H)
UNLOAD (H)
KEY SCAN IN
SERIAL CLOCK
SERIAL DATA OUT
SERIAL DATA IN
H.SW (CYLINDER LOCK)
REEL SENSOR
SUPPLY PHOTO
TAKE UP PHOTO
POWER ON (L)
DEW (H)
S 1
S 2
S 3
MODE SELECT SIGNAL IN
SAFETY TAB (L)
OSC 1
OSC 2
CUE/REV (H)
KEY SCAN
KEY SCAN
POWER ON (L)
LOAD UP SENSOR LED
SEARCH (L)
D-UNLOAD (H)
DELAYED AUDIO REC (L)
DELAYED REC (L)
CAP X8 (H)
CAP X4 (H)
CAP REV (H)
CAP ON (H)
STILL (H)
CYL ON (H)
TIMER SET (H)
Q6002
X6001
C6015
C6016
QR6004
CUE/REV (H)
POWER OFF (L)
TO POWER Q1002-(B)
SEARCH (L)
TO IC2006-(5)
D-UNLOAD (H)
TO IC2004-(9)
CAP REV (H)
TO IC2002-(13)
CAP ON (H)
TO IC2002-(22)
STILL (H)
TO QR2003-(B)
CAPSTAN X4 (H)
CAPSTAN X2 (H)
CYL. ON (L)
TO QR2004-(B)
TO SERVO
POWER OUT
SUN
MON
TUE
WED
THU
FRI
SAT
CH.LOOK
ON
OFF
CH
OTR
AFC
W
IC7504
BT MEMORY FD TUNER
IC7501
IC7503
POWER ON (L)
TIMER DATA
POWER ON : ON
Q7522
TIMER SET SW
ON ⟷ OFF
TIMER SECTION
BP7503
BP6501
BP1508
BP1507
BP1512
F.LOADING MOTOR / LOADING MOTOR DRIVE
UNREG 14V
IC6002
MODE SELECT SWITCH
MOTOR DRIVE CIRCUIT
(F.LOADING MOTOR DRIVE)
F.LOAD (H)
F.UNLOAD (H)
UPWARD DIRECTION
F. LOADING MOTOR
DOWNWARD DIRECTION
IC6003
LOAD (H)
UNLOAD (H)
LOADING DIRECTION
LOADING MOTOR (CONTROLLING MECHANISM)
UNLOADING DIRECTION
QR6001
(LOADING MOTOR DRIVE)
M

	EJECT	LOADING & UNLOADING	DOWN
CASSETTE IN SW	H	L	H
CASSETTE OUT SW	L	H	H
CASSETTE DOWN SW	H	H	L

	EJECT	STOP	FF/REW	PAUSE	REV	PLAY
S3	H	L	L	L	L	H
S1	L	H	H	H	H	L
S2	H	H	H	L	L	L

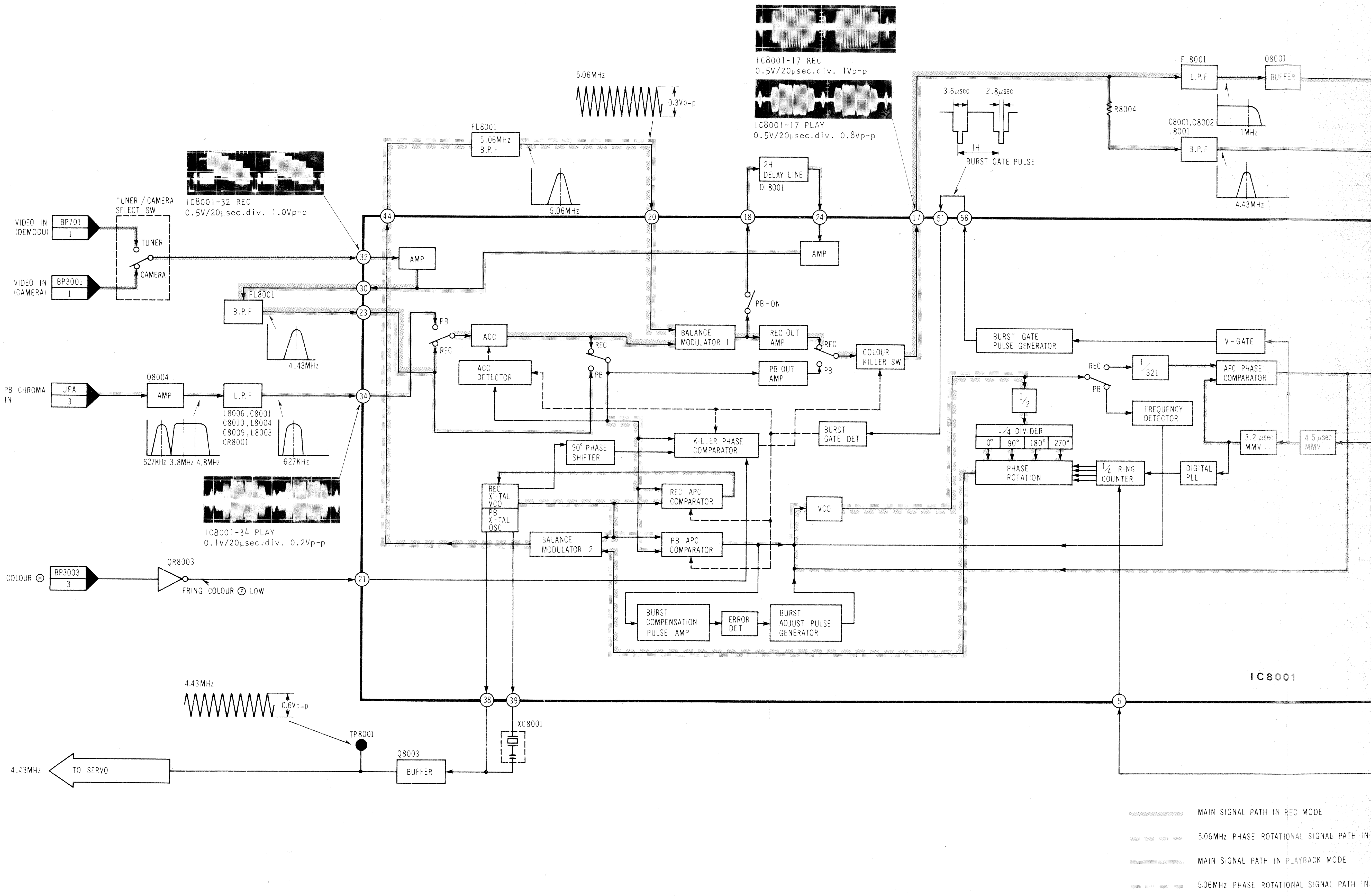
MODE SELECT CONDITION

3-2. LUMINANCE PROCESS BLOCK DIAGRAM

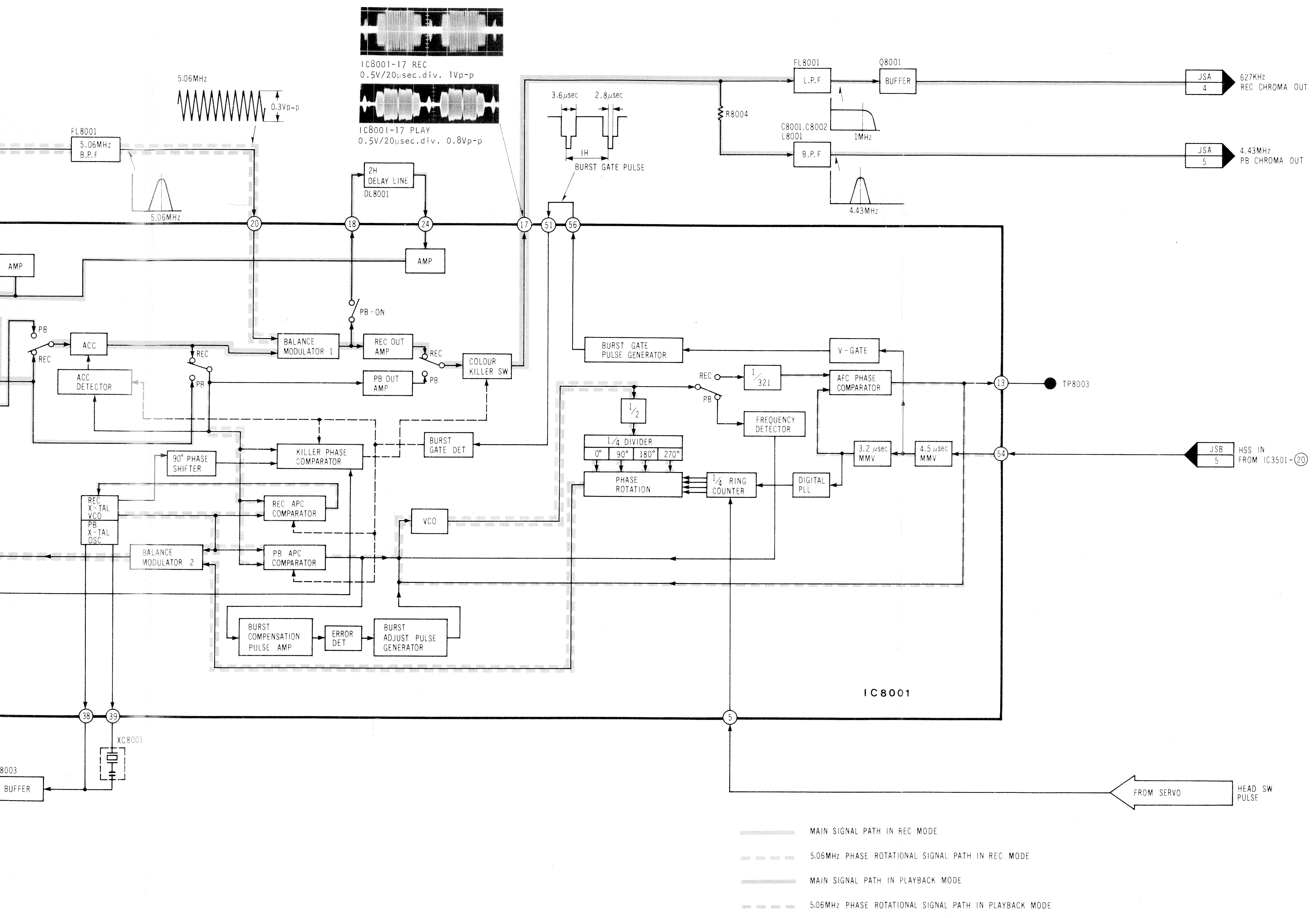

IC3507-7 REC
0.2V/20μsec.div. 0.3Vp-p
4MHz 4.43MHz
UPPER: IC3501-50 REC
0.5V/20 sec.div. 0.3Vp-p
LOWER: IC3501-50 PLAY
0.5V/20 sec.div. 0.4Vp-p
LUMINANCE SIG.
4MHz
CLAMP
NON-LINEAR EMPHASIS
-20dB
-10dB
-0dB
f(MHz)
MAIN EMPHASIS
f(MHz)
SYNC TIP
WHITE LEVEL
FM MODOURATION
FM SIG.
3.8
4.8
VIDEO IN
JSB 4
AGC AMP
REC
PB
AMP
PLAY AMP
L.P.F
FL3501
BUFFER
C3502
VIDEO AMP
FEED BACK AMP
P.B
NON-LINEAR ENPHASIS DE-ENPHASIS
C3503
CLAMP ENPHASIS
WHITE/DARK CLIP
FM MODULATOR
TP3501
AGC DET
PULSE DELAY
SYNC SEP
IC3501
TP3509
TP3502
R3521
R3534
L3504,C3523
C3524,L3505
H.P.F
Q3501
MIX AMP
Q3503,Q3504
REC AMP
Y-REC CURR
TP3507
Q3506
PB:ON
BP002 3
VIDEO HEAD L
TP3506
BP002 5
R3532
Q3505
REC:ON
627KHz CHROMA SIG.
627KHz
1MHz
5MHz
HSS
JPB 5
PB. CHROMA
JPA 5
REC Ⓗ
EE Ⓗ
JPB 3
IC3501-5 PLAY
0.2V/20μsec.div. 0.2Vp-p
TP3504
TP3508
VIDEO HEAD R
BP002 2
HEAD SW INPUT
5Vp-p
R3556
C3537
PG AMP
L-Q
R3528
Q3502
REC:ON
L PEAK
EE AMP
REC/EE
PB
VV AMP
MIX AMP
NOISE CANCELLER
C3512
LIMITER
IC3501
H.P.F
C3516
R3516
C3505
R3503,R3504
DL3501
1H DELAY LINE
Q3508
BUFFER
AMP
OUT PUT AMP
GATE AMP
DROP OUT DETECTOR
IC3502
L3510,C3539
PHASE COMPENSATOR
Q3507
AMP
AGC DET
AGC AMP
HEAD SW
C3556
BP002 1
VIDEO HEAD L
RY3550
R
L
FL3502
L.P.F
FM DEMO
MAIN LIMITER
SUB LIMITER
IC3501
CR3501,R3505
L.P.F
R3575
VV LEVEL
3.8MHz 4.8MHz
C3542
L3512
627KHz TRAP
HEAD AMP OUTPUT
(RF SIGNAL)
CHROMA AMP
IC3502
C3555
C3554
L PEAK
D3550
R PEAK
C3532
Q3550
INV
R3532
R-Q
R3553
L-Q
Q3551
PB:ON
Q3552
STILL:ON
JPC 2
EXCEPT REC 5V
JPA 2
DELAYED REC 12V
JPA 4
REC CHROMA
JPD 3
STILL Ⓗ
JPC 4
HEAD SW
JPA 3
CHROMA OUT
TP3503
VIDEO OUT
BP3005 4
VIDEO OUT
BP3001 2
Q3001
AMP
FL3001
PHASE COMPENSATOR
TP3001
Q3002
AMP
VIDEO OUT
JSB 2
MAIN P.C.B
VJB03197
DOC
JSD 4
DOC
NORMAL
LIMITER
IC3050
DEF AMP 1
JSD 1
C3062,C3065
DE EMPHASIS
C3059
L3052
R3058
C3060
L3053
R3059
AMP
DEF AMP 2
AMP
DEMODU IN
JSD 2
L3051,C3058
L.P.F
FM DEMOD
LIMITER
AMP
DELAY FM
JSD 5
LINE MUTUAL
R3056
R3018
PICTURE VR
MAIN P.C.B
VJB03197
MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE

Back Page:
SYSTEM CONTROL Section

3-3. CHROMINANCE PROCESS BLOCK DIAGRAM

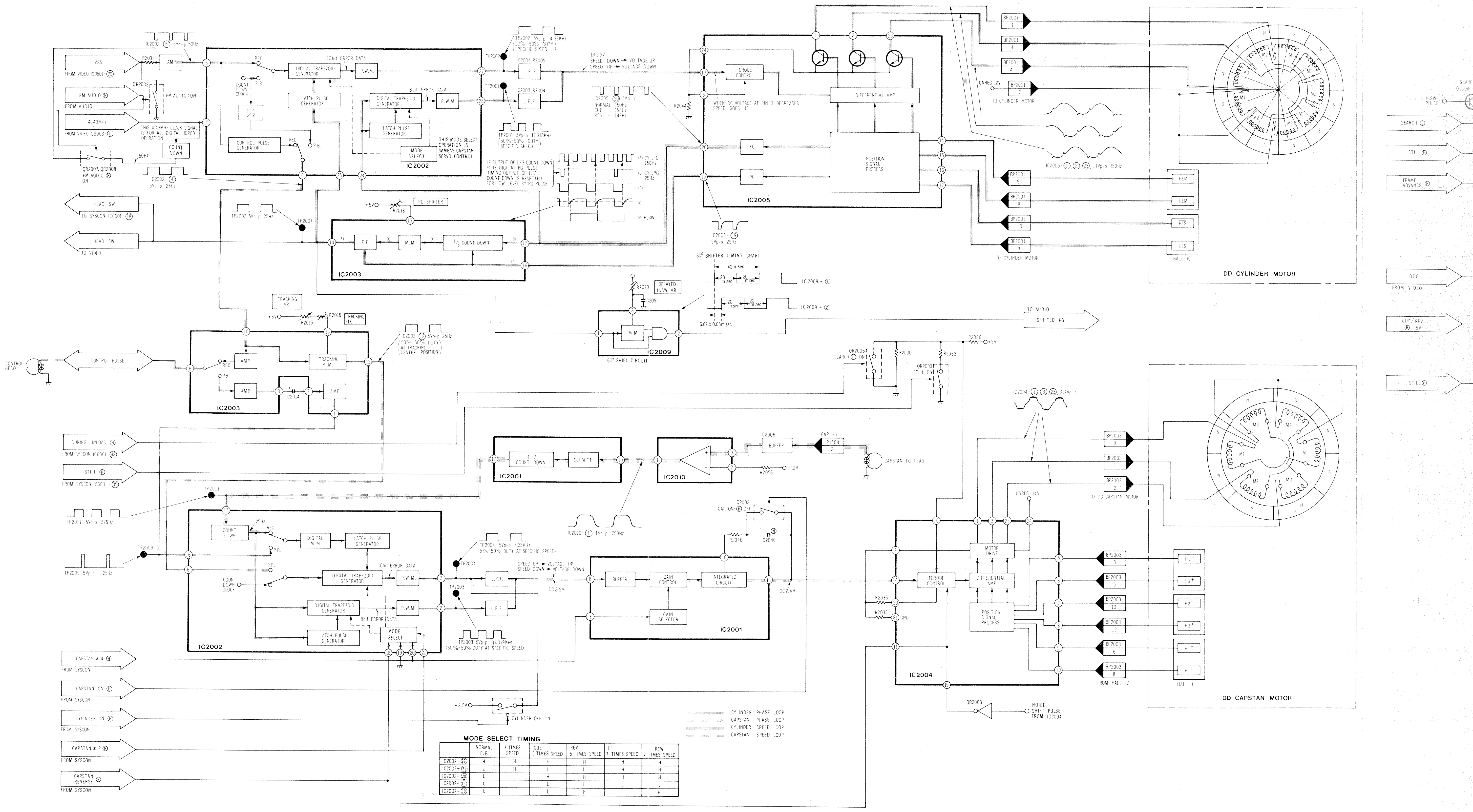

VIDEO IN (DEMODU)
BP701 1
VIDEO IN (CAMERA)
BP3001 1
TUNER / CAMERA SELECT SW
TUNER
CAMERA
IC8001-32 REC
0.5V/20μsec.div. 1.0Vp-p
FL8001
B.P.F
4.43MHz
PB CHROMA IN
JPA 3
Q8004
AMP
L.P.F
L8006, C8001
C8010, L8004
C8009, L8003
CR8001
627KHz 3.8MHz 4.8MHz
627KHz
IC8001-34 PLAY
0.1V/20μsec.div. 0.2Vp-p
COLOUR Ⓗ
BP3003 3
QR8003
FRING COLOUR Ⓟ LOW
4.43MHz
0.6Vp-p
TP8001
Q8003
BUFFER
4.43MHz
TO SERVO
XC8001
FL8001
5.06MHz B.P.F
5.06MHz
5.06MHz
0.3Vp-p
AMP
ACC
ACC DETECTOR
PB
REC
BALANCE MODULATOR 1
REC OUT AMP
PB OUT AMP
90° PHASE SHIFTER
KILLER PHASE COMPARATOR
REC X-TAL VCO
PB X-TAL OSC
REC APC COMPARATOR
PB APC COMPARATOR
BALANCE MODULATOR 2
BURST COMPENSATION PULSE AMP
ERROR DET
BURST ADJUST PULSE GENERATOR
VCO
IC8001-17 REC
0.5V/20μsec.div. 1Vp-p
IC8001-17 PLAY
0.5V/20μsec.div. 0.8Vp-p
2H DELAY LINE
DL8001
AMP
PB-ON
COLOUR KILLER SW
BURST GATE DET
3.6μsec
2.8μsec
1H
BURST GATE PULSE
BURST GATE PULSE GENERATOR
FL8001
L.P.F
Q8001
BUFFER
R8004
C8001, C8002
L8001
1MHz
B.P.F
4.43MHz
V-GATE
1/321
AFC PHASE COMPARATOR
1/2
1/4 DIVIDER
0° 90° 180° 270°
PHASE ROTATION
1/4 RING COUNTER
FREQUENCY DETECTOR
DIGITAL PLL
3.2μsec MMV
4.5μsec MMV
IC8001
44
20
18
24
17
51
56
32
30
23
34
21
38
39
5
MAIN SIGNAL PATH IN REC MODE
5.06MHz PHASE ROTATIONAL SIGNAL PATH IN
MAIN SIGNAL PATH IN PLAYBACK MODE
5.06MHz PHASE ROTATIONAL SIGNAL PATH IN

AGRAM


IC8001-17 REC
0.5V/20μsec.div. 1Vp-p
IC8001-17 PLAY
0.5V/20μsec.div. 0.8Vp-p
5.06MHz
0.3Vp-p
FL8001
5.06MHz
B.P.F
5.06MHz
2H
DELAY LINE
DL8001
3.6μsec
2.8μsec
1H
BURST GATE PULSE
FL8001
L.P.F
Q8001
BUFFER
R8004
C8001,C8002
L8001
1MHz
B.P.F
4.43MHz
JSA
4
627KHz
REC CHROMA OUT
JSA
5
4.43MHz
PB CHROMA OUT
20
18
24
17
51
56
AMP
AMP
PB-ON
PB
REC
ACC
REC
PB
ACC
DETECTOR
BALANCE
MODULATOR 1
REC OUT
AMP
REC
PB OUT
AMP
PB
COLOUR
KILLER SW
BURST GATE
PULSE GENERATOR
V-GATE
REC
1/321
AFC PHASE
COMPARATOR
PB
1/2
FREQUENCY
DETECTOR
13
TP8003
1/4 DIVIDER
0°
90°
180°
270°
PHASE
ROTATION
1/4 RING
COUNTER
DIGITAL
PLL
3.2 μsec
MMV
4.5 μsec
MMV
54
JSB
5
HSS IN
FROM IC3501-⑳
90° PHASE
SHIFTER
KILLER PHASE
COMPARATOR
BURST
GATE DET
REC
X-TAL
VCO
PB
X-TAL
OSC
REC APC
COMPARATOR
VCO
BALANCE
MODULATOR 2
PB APC
COMPARATOR
BURST
COMPENSATION
PULSE AMP
ERROR
DET
BURST
ADJUST PULSE
GENERATOR
IC8001
38
39
5
XC8001
8003
BUFFER
FROM SERVO
HEAD SW
PULSE
MAIN SIGNAL PATH IN REC MODE
5.06MHz PHASE ROTATIONAL SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
5.06MHz PHASE ROTATIONAL SIGNAL PATH IN PLAYBACK MODE

Next Page:
SERVO Section

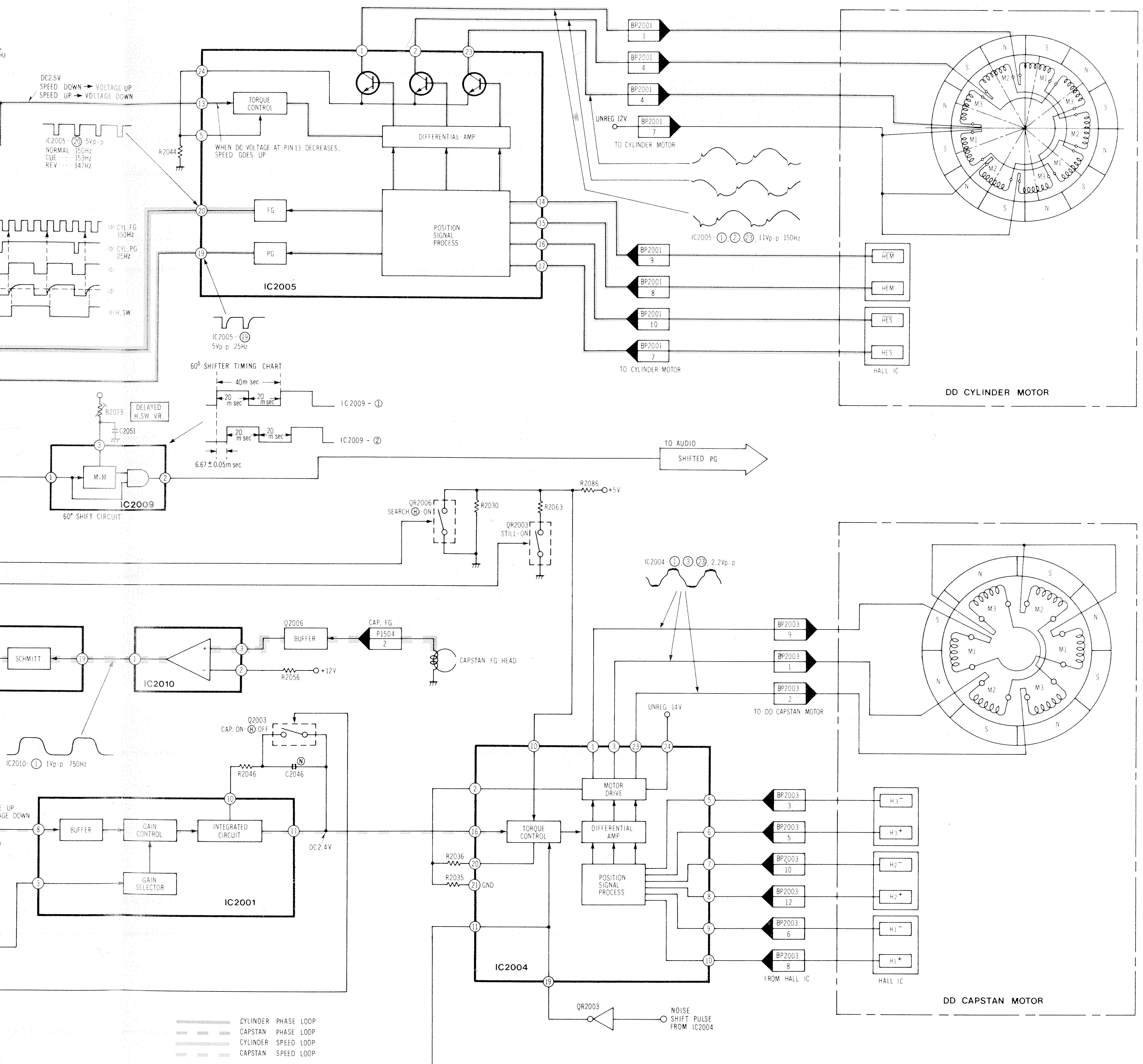
3-4. SERVO BLOCK DIAGRAM


IC2002
IC2003
IC2005
IC2009
IC2001
IC2010
IC2004
DIGITAL TRAPEZOID GENERATOR
LATCH PULSE GENERATOR
P.W.M.
MODE SELECT
CONTROL PULSE GENERATOR
COUNT DOWN
L.P.F.
TORQUE CONTROL
DIFFERENTIAL AMP
POSITION SIGNAL PROCESS
FG
PG
F.F.
M.M.
1/3 COUNT DOWN
PG SHIFTER
TRACKING VR
TRACKING FIX
TRACKING M.M.
AMP
DELAYED H.SW VR
60° SHIFT CIRCUIT
60° SHIFTER TIMING CHART
TO AUDIO SHIFTED PG
1/2 COUNT DOWN
SCHMITT
BUFFER
GAIN CONTROL
GAIN SELECTOR
INTEGRATED CIRCUIT
MOTOR DRIVE
DIFFERENTIAL AMP
VSS FROM VIDEO IC3501
FM AUDIO FROM AUDIO
4.43MHz FROM VIDEO Q8003
THIS 4.43MHz CLOCK SIGNAL IS FOR ALL DIGITAL IC2001 OPERATION.
HEAD SW TO SYSCON IC6001
HEAD SW TO VIDEO
CONTROL HEAD
CONTROL PULSE
DURING UNLOAD FROM SYSCON IC6001
STILL FROM SYSCON IC6001
CAPSTAN × 4 FROM SYSCON
CAPSTAN ON FROM SYSCON
CYLINDER ON FROM SYSCON
CAPSTAN × 2 FROM SYSCON
CAPSTAN REVERSE FROM SYSCON
THIS MODE SELECT OPERATION IS SAMEAS CAPSTAN SERVO CONTROL
IF OUTPUT OF 1/3 COUNT DOWN (c) IS HIGH AT PG PULSE TIMING OUTPUT OF 1/3 COUNT DOWN IS RESETTED FOR LOW LEVEL BY PG PULSE
DC2.5V SPEED DOWN → VOLTAGE UP SPEED UP → VOLTAGE DOWN
WHEN DC VOLTAGE AT PIN13 DECREASES, SPEED GOES UP
IC2005-㉒ 5Vp-p NORMAL 150Hz CUE 153Hz REV 147Hz
TP2002 5Vp-p 4.33KHz (50%-50% DUTY) SPECIFIC SPEED
TP2001 5Vp-p 17.318KHz (50%-50% DUTY) SPECIFIC SPEED
TP2007 5Vp-p 25Hz
TP2011 5Vp-p 375Hz
TP2009 5Vp-p 25Hz
TP2004 5Vp-p 4.33KHz 5%-50% DUTY AT SPECIFIC SPEED
TP2003 5Vp-p 17.318KHz 50%-50% DUTY AT SPECIFIC SPEED
IC2003-⑫ 5Vp-p 25Hz (50%-50% DUTY AT TRACKING CENTER POSITION)
IC2010-① 1Vp-p 750Hz
IC2004-①②㉓ 2.2Vp-p
IC2005-①②㉓ 11Vp-p 150Hz
IC2005-⑯ 5Vp-p 25Hz
CAP. FG
CAPSTAN FG HEAD
UNREG 12V
UNREG 14V
TO CYLINDER MOTOR
TO DD CAPSTAN MOTOR
FROM HALL IC
HALL IC
DD CYLINDER MOTOR
DD CAPSTAN MOTOR
NOISE SHIFT PULSE FROM IC2004
CYLINDER OFF : ON
CAP. ON : OFF
SEARCH ON
STILL ON
SEARCH
STILL
FRAME ADVANCE
DOC FROM VIDEO
CUE/REV 5V
H.SW PULSE

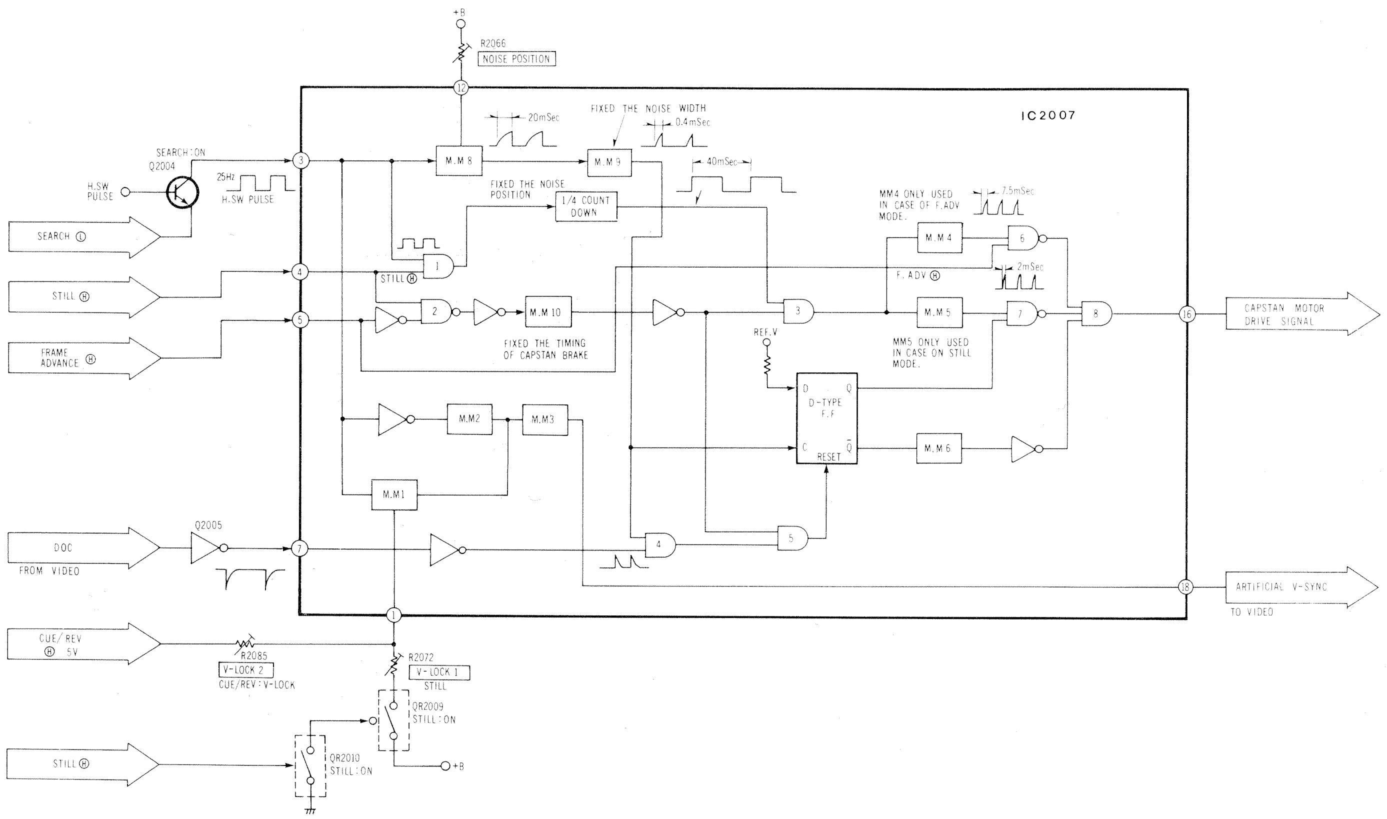
CYLINDER PHASE LOOP
CAPSTAN PHASE LOOP
CYLINDER SPEED LOOP
CAPSTAN SPEED LOOP

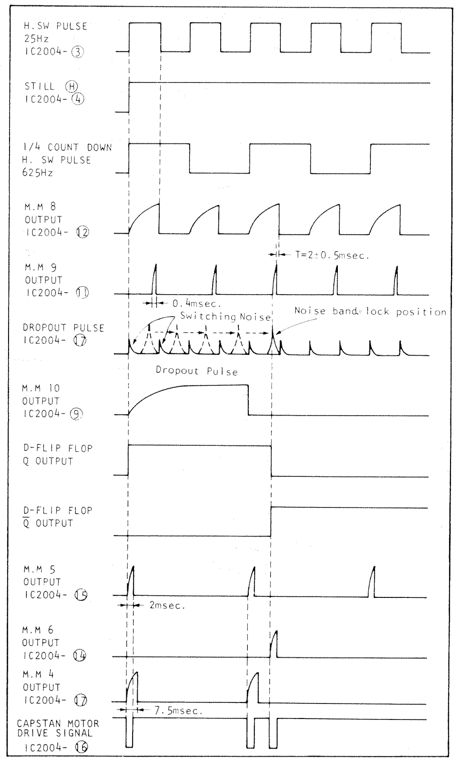
MODE SELECT TIMING

	NORMAL P.B	3 TIMES SPEED	CUE 5 TIMES SPEED	REV 5 TIMES SPEED	FF 7 TIMES SPEED	REW 7 TIMES SPEED
IC2002-㉒	H	H	H	H	H	H
IC2002-㉑	L	H	L	L	H	H
IC2002-⑳	L	L	H	H	H	H
IC2002-⑲	L	L	L	L	L	L
IC2002-⑱	L	L	L	H	L	H

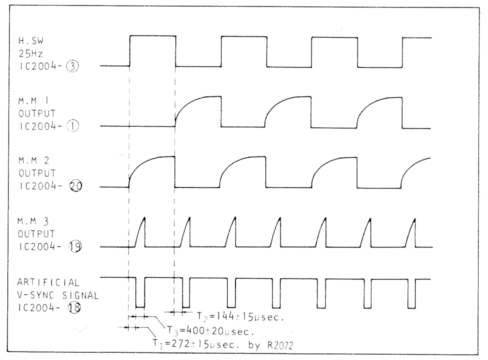

Hz
DC2.5V
SPEED DOWN → VOLTAGE UP
SPEED UP → VOLTAGE DOWN
IC2005 - ⑳ 5Vp-p
NORMAL···150Hz
CUE·····153Hz
REV·····147Hz
R2044
TORQUE CONTROL
WHEN DC VOLTAGE AT PIN 13 DECREASES, SPEED GOES UP
DIFFERENTIAL AMP
FG
PG
POSITION SIGNAL PROCESS
IC2005
(a) CYL.FG 150Hz
(b) CYL.PG 25Hz
(c)
(d)
(e) H.SW
IC2005 - ⑲ 5Vp-p 25Hz
60° SHIFTER TIMING CHART
40m sec
20 m sec
IC 2009 - ①
IC 2009 - ②
6.67 ± 0.05m sec
R2073
DELAYED H.SW VR
C2051
M-M
IC2009
60° SHIFT CIRCUIT
UNREG 12V
BP2001
TO CYLINDER MOTOR
IC2005 - ①, ②, ㉓, 11Vp-p 150Hz
HEM
HES
HALL IC
M1
M2
M3
N
S
DD CYLINDER MOTOR
TO AUDIO
SHIFTED PG
R2086
+5V
QR2006
SEARCH Ⓗ-ON
R2030
R2063
QR2003
STILL-ON
SCHMITT
IC2010
Q2006
BUFFER
CAP. FG
P1504
CAPSTAN FG HEAD
R2056
+12V
IC2010 - ① 1Vp-p 750Hz
Q2003
CAP. ON - Ⓗ:OFF
R2046
C2046
Ⓝ
E UP
AGE DOWN
BUFFER
GAIN CONTROL
INTEGRATED CIRCUIT
GAIN SELECTOR
IC2001
DC2.4V
IC2004 - ①, ③, ㉓, 2.2Vp-p
BP2003
TO DD CAPSTAN MOTOR
UNREG 14V
MOTOR DRIVE
TORQUE CONTROL
DIFFERENTIAL AMP
POSITION SIGNAL PROCESS
R2036
R2035
GND
IC2004
QR2003
NOISE SHIFT PULSE FROM IC2004
FROM HALL IC
H3⁻
H3⁺
H2⁻
H2⁺
H1⁻
H1⁺
HALL IC
DD CAPSTAN MOTOR
CYLINDER PHASE LOOP
CAPSTAN PHASE LOOP
CYLINDER SPEED LOOP
CAPSTAN SPEED LOOP

REV 5 TIMES SPEED	FF 7 TIMES SPEED	REW 7 TIMES SPEED
H	H	H
L	H	H
H	H	H
L	L	L
H	L	H


+B
R2066
NOISE POSITION
IC2007
H.SW PULSE
SEARCH:ON
Q2004
25Hz
H.SW PULSE
SEARCH Ⓛ
STILL Ⓗ
FRAME ADVANCE Ⓗ
M.M 8
20mSec
FIXED THE NOISE WIDTH
0.4mSec
M.M 9
FIXED THE NOISE POSITION
1/4 COUNT DOWN
40mSec
STILL Ⓗ
M.M 10
FIXED THE TIMING OF CAPSTAN BRAKE
MM4 ONLY USED IN CASE OF F.ADV MODE.
7.5mSec
M.M 4
F. ADV Ⓗ
2mSec
M.M 5
MM5 ONLY USED IN CASE ON STILL MODE.
REF.V
D-TYPE F.F
RESET
M.M 6
M.M2
M.M3
M.M1
CAPSTAN MOTOR DRIVE SIGNAL
DOC
FROM VIDEO
Q2005
ARTIFICIAL V-SYNC
TO VIDEO
CUE/REV Ⓗ 5V
R2085
V-LOCK 2
CUE/REV: V-LOCK
R2072
V-LOCK 1
STILL
QR2009
STILL:ON
STILL Ⓗ
QR2010
STILL:ON
+B

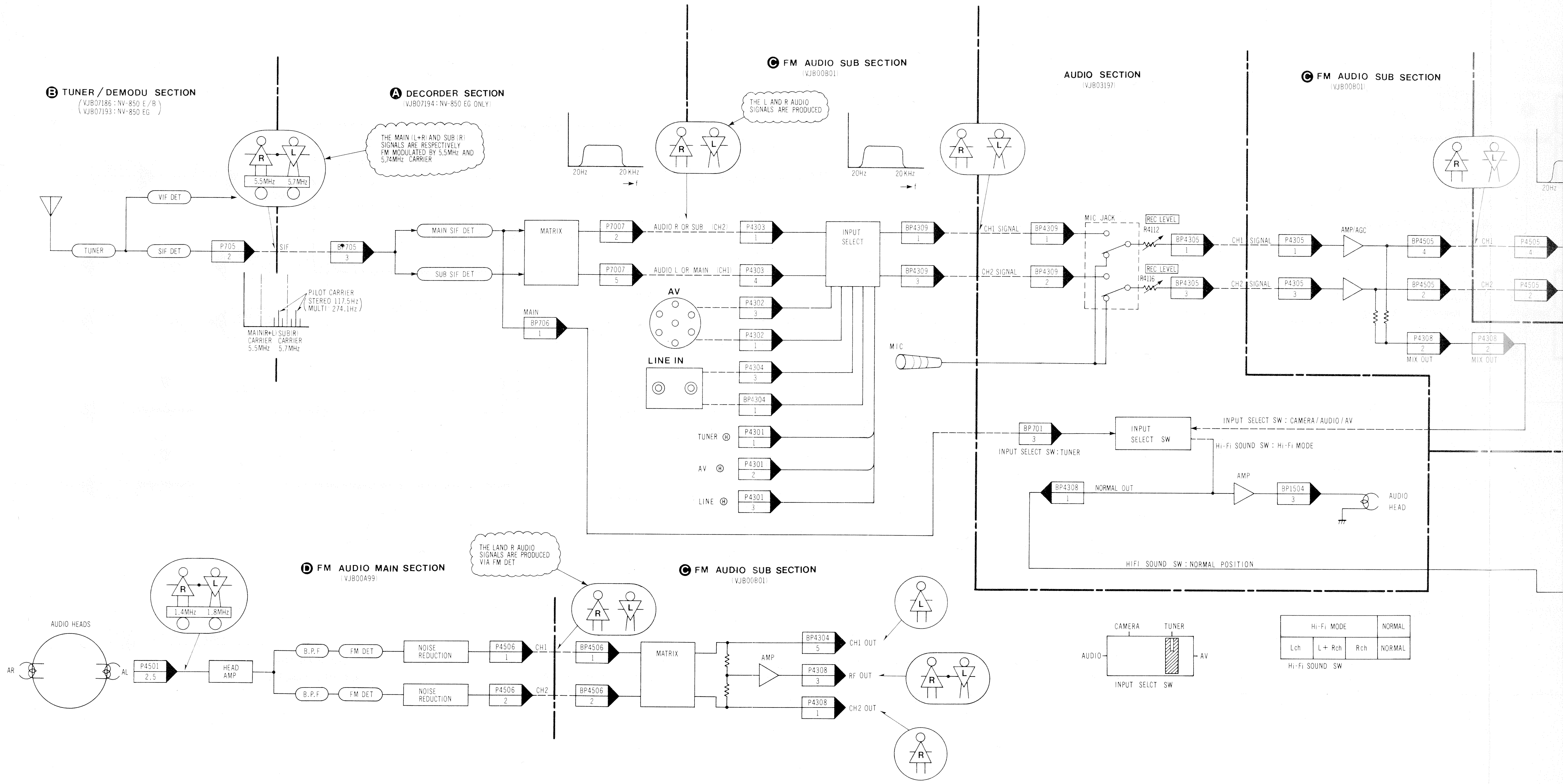


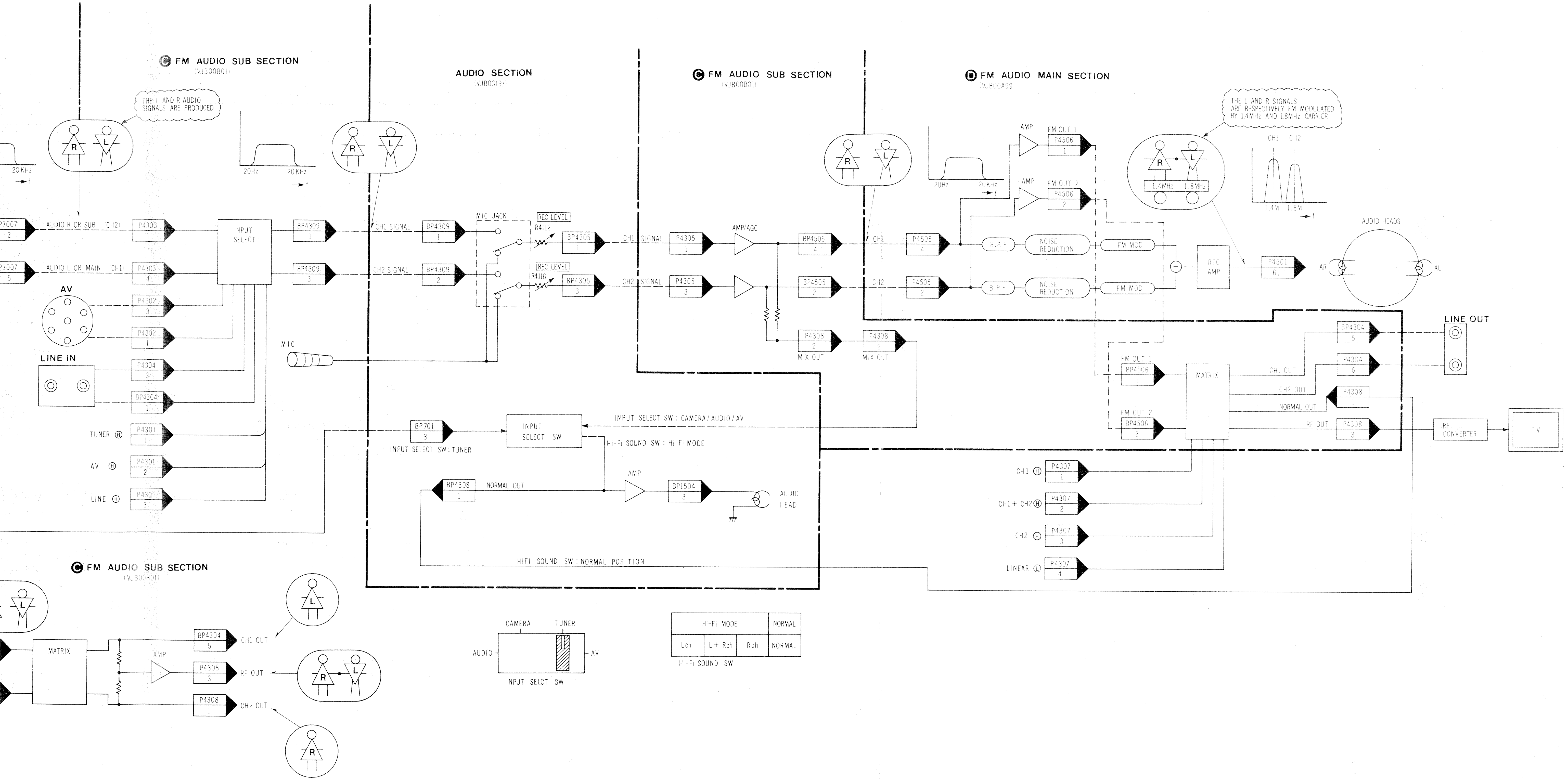
STILL CIRCUIT TIMING CHART



PHASE RELATION OF THE ARTIFICIAL V-SYNC SIGNAL IN STILL

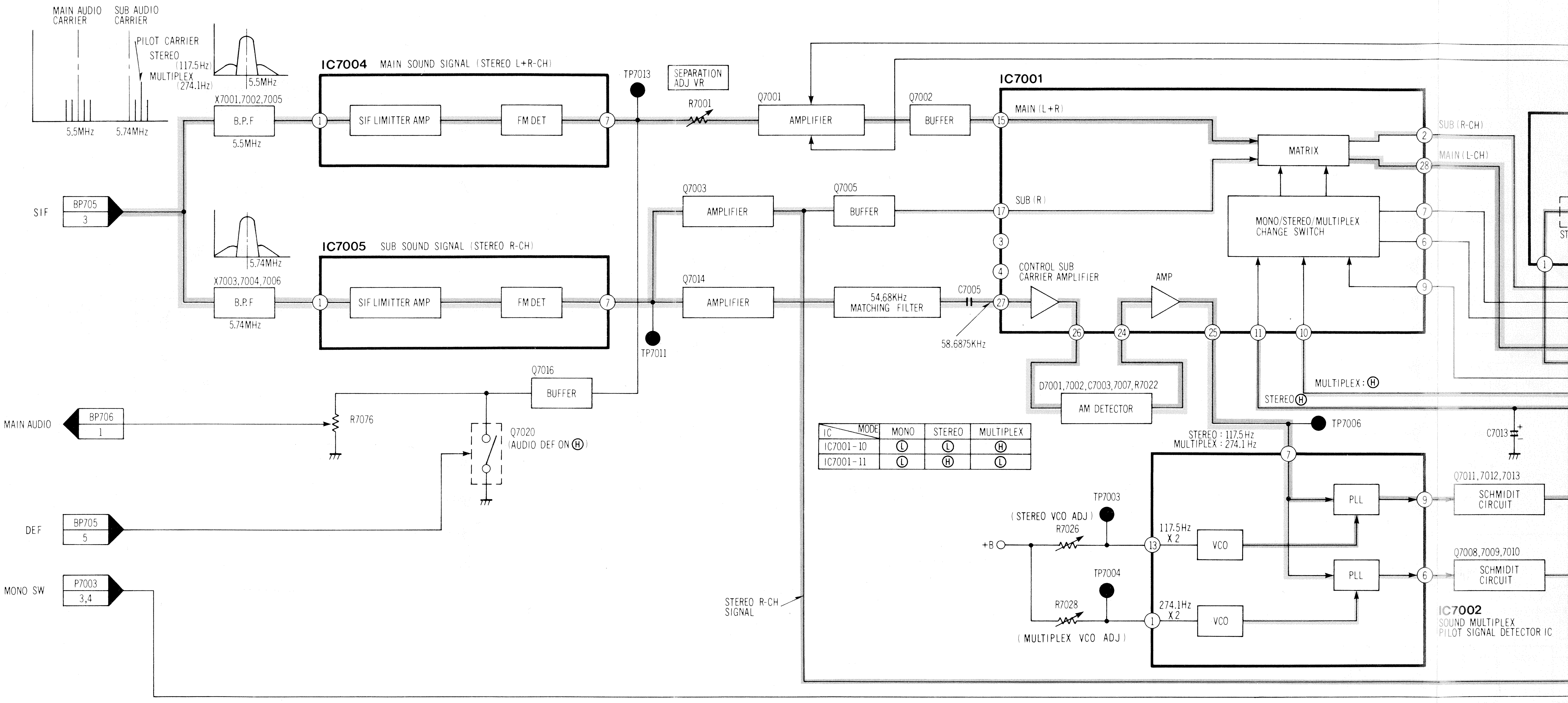
3-5. AUDIO OVERALL BLOCK DIAGRAM


B TUNER / DEMODU SECTION
(VJB07186 : NV-850 E/B)
(VJB07193 : NV-850 EG)
A DECORDER SECTION
(VJB07194 : NV-850 EG ONLY)
C FM AUDIO SUB SECTION
(VJB00B01)
AUDIO SECTION
(VJB03197)
C FM AUDIO SUB SECTION
(VJB00B01)
THE MAIN (L+R) AND SUB (R) SIGNALS ARE RESPECTIVELY FM MODULATED BY 5.5MHz AND 5.74MHz CARRIER
R
L
5.5MHz
5.7MHz
VIF DET
TUNER
SIF DET
P705
2
SIF
BP705
3
PILOT CARRIER
(STEREO 117.5Hz)
(MULTI 274.1Hz)
MAIN(R+L) CARRIER 5.5MHz
SUB(R) CARRIER 5.7MHz
MAIN SIF DET
SUB SIF DET
MATRIX
MAIN
BP706
1
20Hz
20KHz
→ f
THE L AND R AUDIO SIGNALS ARE PRODUCED
P7007
2
AUDIO R OR SUB (CH2)
P7007
5
AUDIO L OR MAIN (CH1)
P4303
1
P4303
4
INPUT SELECT
AV
P4302
3
P4302
1
LINE IN
P4304
3
BP4304
1
TUNER Ⓗ
P4301
1
AV Ⓗ
P4301
2
LINE Ⓗ
P4301
3
BP4309
1
BP4309
3
MIC
CH1 SIGNAL
CH2 SIGNAL
BP4309
1
BP4309
2
MIC JACK
REC LEVEL
R4112
REC LEVEL
R4116
BP4305
1
BP4305
3
CH1 SIGNAL
CH2 SIGNAL
P4305
1
P4305
3
AMP/AGC
BP4505
4
BP4505
2
P4308
2
MIX OUT
CH1
P4505
4
CH2
P4505
2
P4308
2
MIX OUT
BP701
3
INPUT SELECT SW : TUNER
INPUT SELECT SW
INPUT SELECT SW : CAMERA / AUDIO / AV
Hi-Fi SOUND SW : Hi-Fi MODE
AMP
BP4308
1
NORMAL OUT
BP1504
3
AUDIO HEAD
HIFI SOUND SW : NORMAL POSITION
CAMERA
TUNER
AUDIO
AV
INPUT SELCT SW
Hi-Fi MODE
NORMAL
Lch
L+ Rch
Rch
NORMAL
Hi-Fi SOUND SW
D FM AUDIO MAIN SECTION
(VJB00A99)
C FM AUDIO SUB SECTION
(VJB00B01)
THE LAND R AUDIO SIGNALS ARE PRODUCED VIA FM DET
AUDIO HEADS
AR
AL
1.4MHz
1.8MHz
P4501
2.5
HEAD AMP
B.P.F
FM DET
NOISE REDUCTION
B.P.F
FM DET
NOISE REDUCTION
P4506
1
CH1
P4506
2
CH2
BP4506
1
BP4506
2
MATRIX
AMP
BP4304
5
CH1 OUT
P4308
3
RF OUT
P4308
1
CH2 OUT

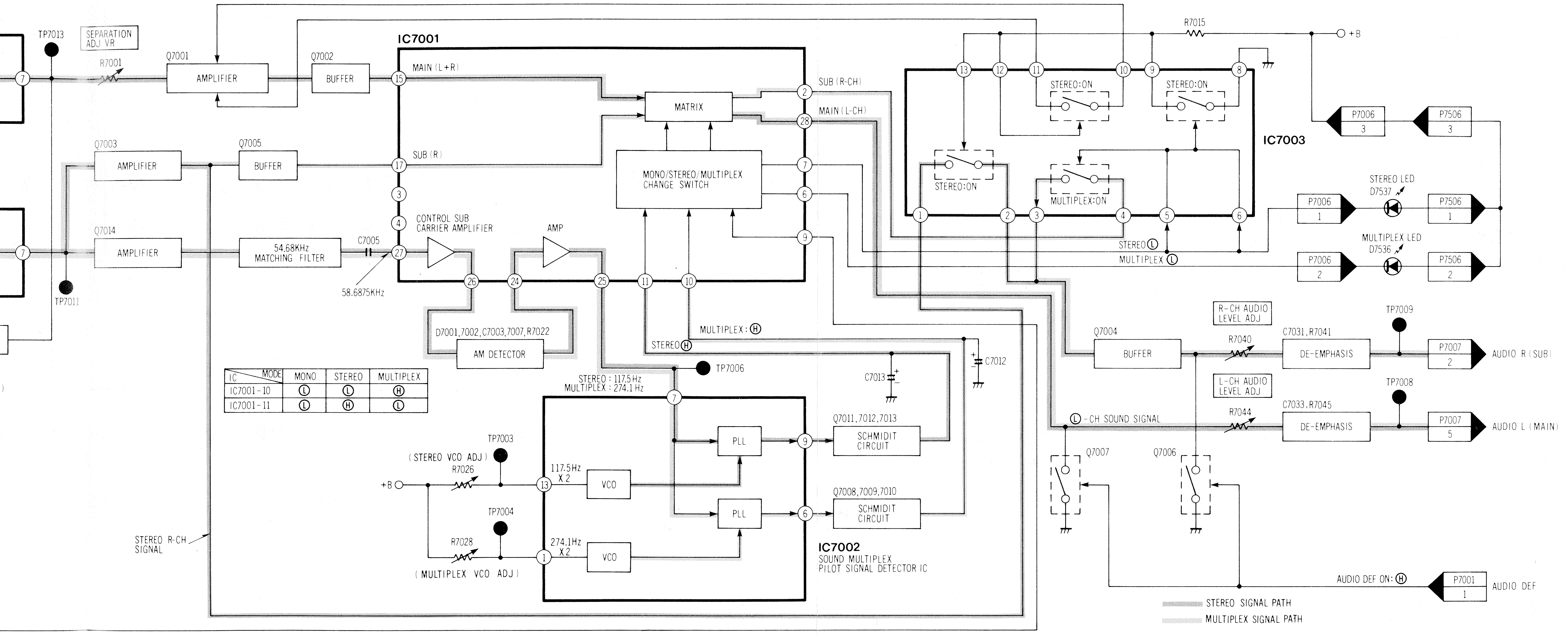

C FM AUDIO SUB SECTION
(VJB00B01)
THE L AND R AUDIO SIGNALS ARE PRODUCED
R
L
20KHz
f
20Hz
20KHz
f
AUDIO SECTION
(VJB03197)
C FM AUDIO SUB SECTION
(VJB00B01)
D FM AUDIO MAIN SECTION
(VJB00A99)
THE L AND R SIGNALS ARE RESPECTIVELY FM MODULATED BY 1.4MHz AND 1.8MHz CARRIER
CH1 CH2
1.4MHz 1.8MHz
1.4M 1.8M
P7007 2
P7007 5
AUDIO R OR SUB (CH2)
AUDIO L OR MAIN (CH1)
P4303 1
P4303 4
INPUT SELECT
BP4309 1
BP4309 3
AV
P4302 3
P4302 1
LINE IN
P4304 3
BP4304 1
TUNER H
P4301 1
AV H
P4301 2
LINE H
P4301 3
CH1 SIGNAL
CH2 SIGNAL
BP4309 1
BP4309 2
MIC JACK
REC LEVEL
R4112
R4116
BP4305 1
BP4305 3
MIC
CH1 SIGNAL
CH2 SIGNAL
P4305 1
P4305 3
AMP/AGC
BP4505 4
BP4505 2
P4308 2
MIX OUT
P4308 2
MIX OUT
CH1
CH2
P4505 4
P4505 2
AMP
FM OUT 1
P4506 1
AMP
FM OUT 2
P4506 2
20Hz
20KHz
f
B.P.F
NOISE REDUCTION
FM MOD
B.P.F
NOISE REDUCTION
FM MOD
REC AMP
P4501 6.1
AUDIO HEADS
AR
AL
LINE OUT
BP4304 5
P4304 6
FM OUT 1
BP4506 1
FM OUT 2
BP4506 2
MATRIX
CH1 OUT
CH2 OUT
NORMAL OUT
RF OUT
P4308 1
P4308 3
RF CONVERTER
TV
BP701 3
INPUT SELECT SW: TUNER
INPUT SELECT SW
INPUT SELECT SW: CAMERA/AUDIO/AV
Hi-Fi SOUND SW: Hi-Fi MODE
BP4308 1
NORMAL OUT
AMP
BP1504 3
AUDIO HEAD
HIFI SOUND SW: NORMAL POSITION
CH1 H
P4307 1
CH1+CH2 H
P4307 2
CH2 H
P4307 3
LINEAR L
P4307 4
C FM AUDIO SUB SECTION
(VJB00B01)
MATRIX
AMP
BP4304 5
CH1 OUT
P4308 3
RF OUT
P4308 1
CH2 OUT
CAMERA
TUNER
AUDIO
AV
INPUT SELCT SW
Hi-Fi MODE
NORMAL
Lch
L+Rch
Rch
NORMAL
Hi-Fi SOUND SW

Next Page:
DECODER Section

Ⓐ DECODER BLOCK DIAGRAM (NV-850EG)

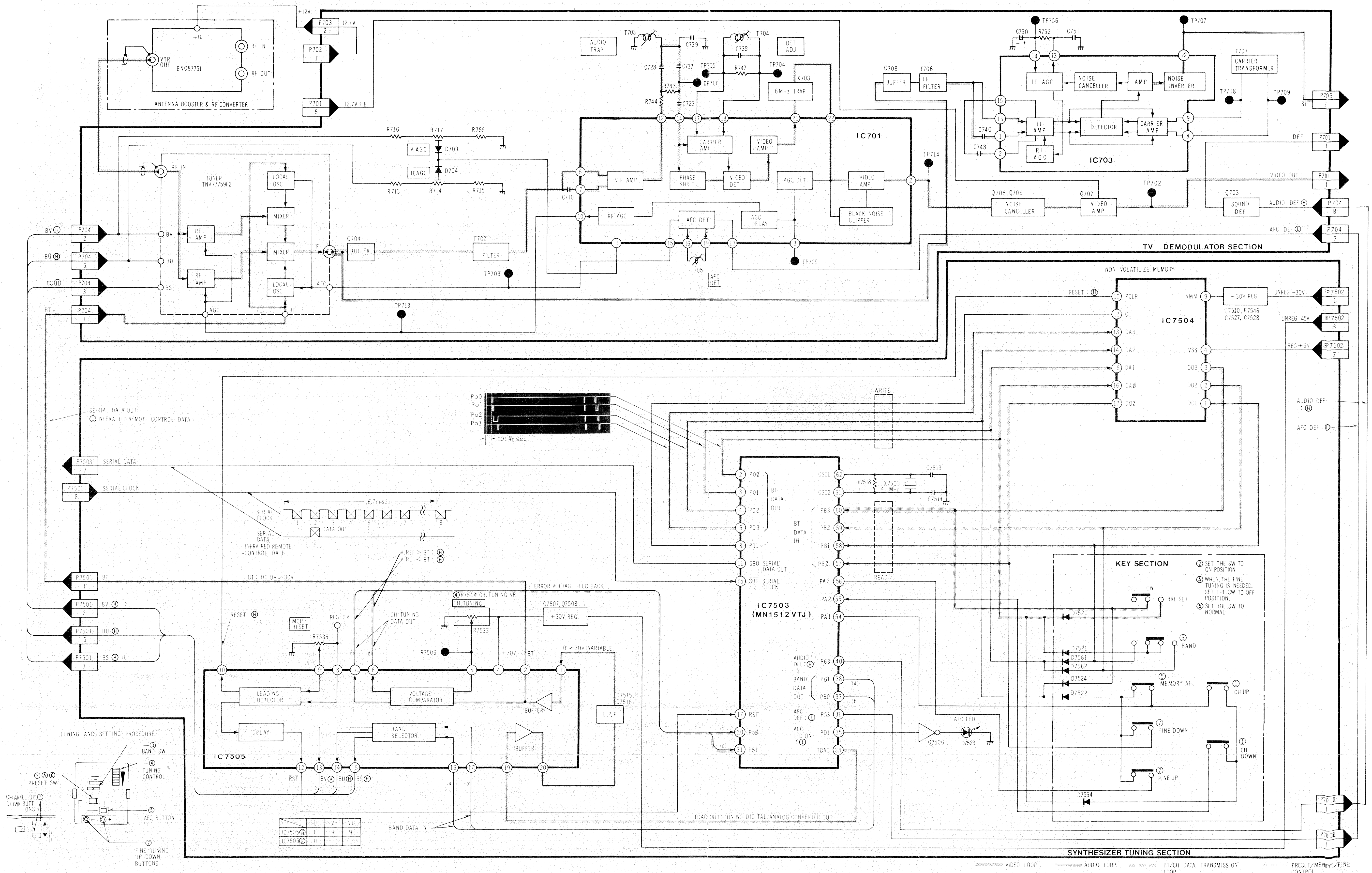

MAIN AUDIO CARRIER
SUB AUDIO CARRIER
PILOT CARRIER
STEREO (117.5Hz)
MULTIPLEX (274.1Hz)
5.5MHz
5.74MHz
SIF
BP705 3
X7001,7002,7005
B.P.F
5.5MHz
X7003,7004,7006
B.P.F
5.74MHz
IC7004 MAIN SOUND SIGNAL (STEREO L+R-CH)
SIF LIMITTER AMP
FM DET
IC7005 SUB SOUND SIGNAL (STEREO R-CH)
SIF LIMITTER AMP
FM DET
TP7013
TP7011
SEPARATION ADJ VR
R7001
Q7001
AMPLIFIER
Q7002
BUFFER
Q7003
AMPLIFIER
Q7005
BUFFER
Q7014
AMPLIFIER
54.68KHz MATCHING FILTER
C7005
58.6875KHz
Q7016
BUFFER
MAIN AUDIO
BP706 1
R7076
Q7020 (AUDIO DEF ON Ⓗ)
DEF
BP705 5
MONO SW
P7003 3,4
IC7001
MAIN (L+R)
SUB (R)
MATRIX
MONO/STEREO/MULTIPLEX CHANGE SWITCH
CONTROL SUB CARRIER AMPLIFIER
AMP
SUB (R-CH)
MAIN (L-CH)
D7001,7002,C7003,7007,R7022
AM DETECTOR
MULTIPLEX : Ⓗ
STEREO Ⓗ
TP7006
STEREO : 117.5Hz
MULTIPLEX : 274.1Hz
C7013
TP7003
(STEREO VCO ADJ)
R7026
+B
117.5Hz X2
VCO
TP7004
R7028
274.1Hz X2
VCO
(MULTIPLEX VCO ADJ)
PLL
PLL
Q7011,7012,7013
SCHMIDIT CIRCUIT
Q7008,7009,7010
SCHMIDIT CIRCUIT
IC7002
SOUND MULTIPLEX PILOT SIGNAL DETECTOR IC
STEREO R-CH SIGNAL

IC \ MODE	MONO	STEREO	MULTIPLEX
IC7001-10	Ⓛ	Ⓛ	Ⓗ
IC7001-11	Ⓛ	Ⓗ	Ⓛ

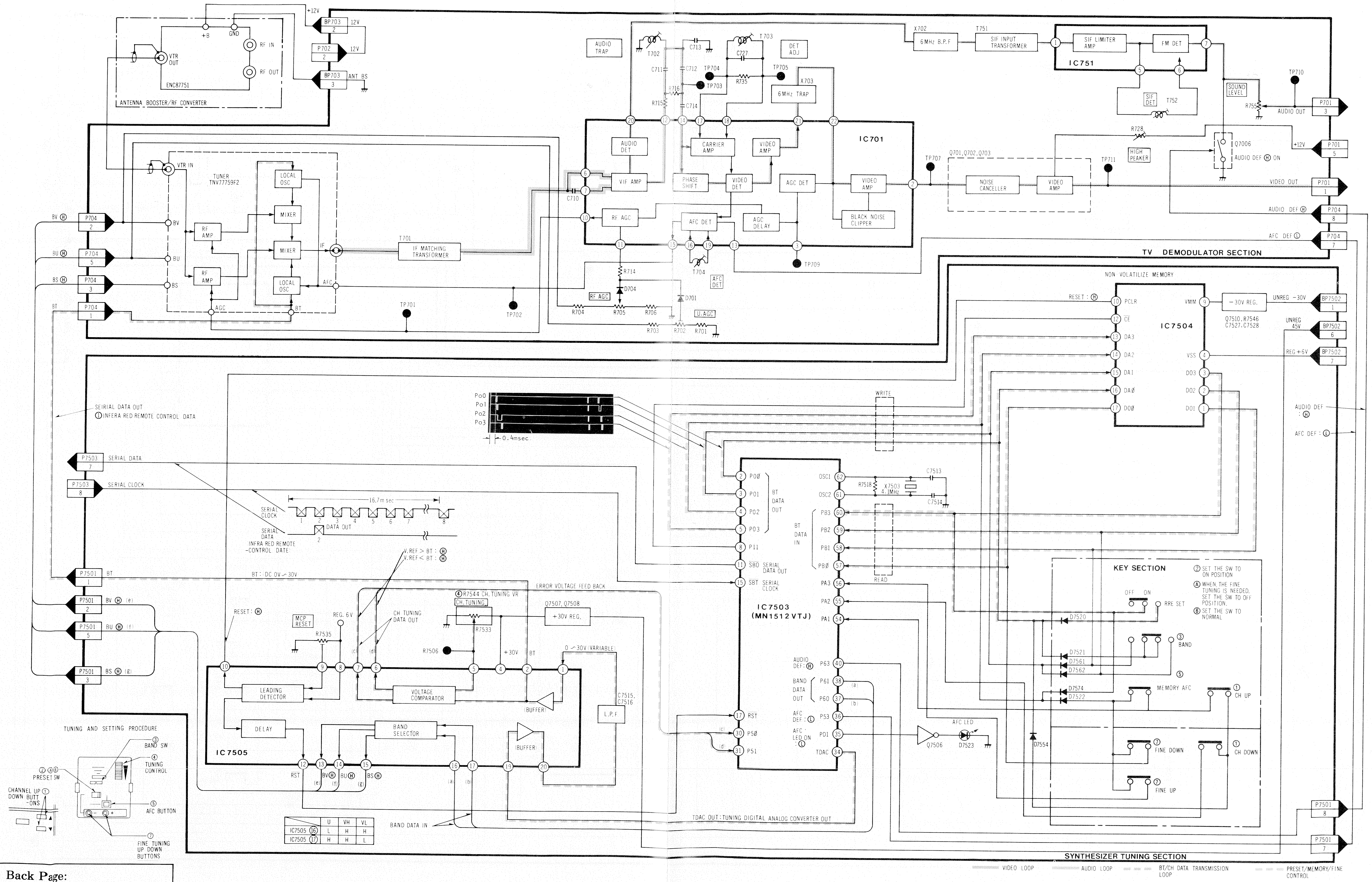

TP7013
SEPARATION ADJ VR
R7001
Q7001
AMPLIFIER
Q7002
BUFFER
IC7001
MAIN (L+R)
SUB (R-CH)
MAIN (L-CH)
MATRIX
Q7003
AMPLIFIER
Q7005
BUFFER
SUB (R)
MONO/STEREO/MULTIPLEX CHANGE SWITCH
CONTROL SUB CARRIER AMPLIFIER
AMP
Q7014
AMPLIFIER
54.68KHz MATCHING FILTER
C7005
58.6875KHz
TP7011
D7001,7002,C7003,7007,R7022
AM DETECTOR
MULTIPLEX : Ⓗ
STEREO Ⓗ
TP7006
STEREO : 117.5Hz
MULTIPLEX : 274.1 Hz
C7013
C7012
Q7011,7012,7013
SCHMIDIT CIRCUIT
Q7008,7009,7010
SCHMIDIT CIRCUIT
PLL
PLL
VCO
VCO
117.5Hz X 2
274.1Hz X 2
TP7003
(STEREO VCO ADJ)
R7026
+B
TP7004
R7028
(MULTIPLEX VCO ADJ)
IC7002
SOUND MULTIPLEX PILOT SIGNAL DETECTOR IC
STEREO R-CH SIGNAL
R7015
+B
STEREO:ON
STEREO:ON
STEREO:ON
MULTIPLEX:ON
IC7003
P7006 3
P7506 3
STEREO LED
D7537
P7006 1
P7506 1
MULTIPLEX LED
D7536
P7006 2
P7506 2
STEREO Ⓛ
MULTIPLEX Ⓛ
R-CH AUDIO LEVEL ADJ
Q7004
BUFFER
R7040
C7031,R7041
DE-EMPHASIS
TP7009
P7007 2
AUDIO R (SUB)
L-CH AUDIO LEVEL ADJ
Ⓛ-CH SOUND SIGNAL
R7044
C7033,R7045
DE-EMPHASIS
TP7008
P7007 5
AUDIO L (MAIN)
Q7007
Q7006
AUDIO DEF ON: Ⓗ
P7001 1
AUDIO DEF
STEREO SIGNAL PATH
MULTIPLEX SIGNAL PATH

IC \ MODE	MONO	STEREO	MULTIPLEX
IC7001-10	Ⓛ	Ⓛ	Ⓗ
IC7001-11	Ⓛ	Ⓗ	Ⓛ

Ⓑ TUNER/DEMODU BLOCK DIAGRAM (NV-850EG)


ANTENNA BOOSTER & RF CONVERTER
ENC87751
VTR OUT
RF IN
RF OUT
+B
+12V
P703
12.7V
P702
P701
12.7V+B
TUNER TNV7775F2
LOCAL OSC
MIXER
RF AMP
BV
BU
BS
AGC
BT
IF
AFC
Q704 BUFFER
T702 IF FILTER
TP703
TP713
P704
V.AGC
U.AGC
D709
D704
R716
R717
R755
R713
R714
R715
AUDIO TRAP
DET ADJ
T703
T704
C739
C735
C728
C737
TP705
TP711
R747
TP704
R743
R744
C723
X703
6MHz TRAP
IC701
CARRIER AMP
VIDEO AMP
PHASE SHIFT
VIDEO DET
AGC DET
VIDEO AMP
VIF AMP
RF AGC
AFC DET
AGC DELAY
BLACK NOISE CLIPPER
C710
T705
AFC DET
TP709
TP714
Q708 BUFFER
T706 IF FILTER
TP706
TP707
C750
R752
C751
IF AGC
NOISE CANCELLER
AMP
NOISE INVERTER
IF AMP
DETECTOR
CARRIER AMP
RF AGC
C740
C748
IC703
T707 CARRIER TRANSFORMER
TP708
TP709
P705
SIF
DEF
VIDEO OUT
Q705, Q706 NOISE CANCELLER
Q707 VIDEO AMP
TP702
Q703 SOUND DEF
AUDIO DEF Ⓗ
AFC DEF Ⓛ
TV DEMODULATOR SECTION
NON VOLATILIZE MEMORY
IC7504
RESET : Ⓛ
PCLR
CE
DA3
DA2
DA1
DA0
DO0
VMM
VSS
DO3
DO2
DO1
-30V REG.
Q7510, R7546
C7527, C7528
UNREG -30V
UNREG 45V
REG +6V
P7502
SERIAL DATA OUT
① INFERA RED REMOTE CONTROL DATA
Po0
Po1
Po2
Po3
0.4msec.
WRITE
READ
P7503
SERIAL DATA
SERIAL CLOCK
16.7msec
SERIAL CLOCK
SERIAL DATA
DATA OUT
INFRA RED REMOTE CONTROL DATE
IC7503 (MN1512VTJ)
P00
P01
P02
P03
P11
SB0 SERIAL DATA OUT
SBT SERIAL CLOCK
BT DATA OUT
BT DATA IN
OSC1
OSC2
R7518
X7503 4.1MHz
C7513
C7514
PB3
PB2
PB1
PB0
PA3
PA2
PA1
AUDIO DEF : Ⓗ
P63
BAND DATA OUT
P61
P60
AFC DEF : Ⓛ
P53
AFC LED ON : Ⓛ
PD1
TDAC
RST
P50
P51
Q7506
AFC LED
D7523
P7501
BT
BT : DC 0V ~ 30V
BV Ⓗ
BU Ⓗ
BS Ⓗ
V.REF > BT : Ⓗ
V.REF < BT : Ⓗ
ERROR VOLTAGE FEED BACK
RESET : Ⓗ
MCP RESET
REG. 6V
R7535
CH. TUNING DATA OUT
④ R7544 CH. TUNING VR
CH. TUNING
R7533
R7506
Q7507, Q7508
+30V REG.
+30V
0 ~ 30V VARIABLE
C7515, C7516
L.P.F
LEADING DETECTOR
VOLTAGE COMPARATOR
BUFFER
DELAY
BAND SELECTOR
BUFFER
IC7505
RST
BV Ⓗ
BU Ⓗ
BS Ⓗ
BAND DATA IN
TDAC OUT : TUNING DIGITAL ANALOG CONVERTER OUT
KEY SECTION
② SET THE SW TO ON POSITION
Ⓐ WHEN THE FINE TUNING IS NEEDED, SET THE SW TO OFF POSITION.
⑤ SET THE SW TO NORMAL
OFF ON
PRE SET
D7520
D7521
D7561
D7562
D7524
D7522
③ BAND
⑤ MEMORY AFC
① CH UP
⑦ FINE DOWN
① CH DOWN
⑦ FINE UP
D7554
P7504
TUNING AND SETTING PROCEDURE
③ BAND SW
④ TUNING CONTROL
②Ⓐ⑥ PRESET SW
CHANNEL UP ① DOWN BUTTONS
⑤ AFC BUTTON
⑦ FINE TUNING UP DOWN BUTTONS
	U	VH	VL
IC7505⑬	L	H	H
IC7505⑭	H	H	L
AUDIO DEF : Ⓗ
AFC DEF : Ⓛ
SYNTHESIZER TUNING SECTION
VIDEO LOOP
AUDIO LOOP
BT/CH DATA TRANSMISSION LOOP
PRESET/MEMORY/FINE CONTROL

Ⓑ TUNER/DEMODU BLOCK DIAGRAM (NV-850E)

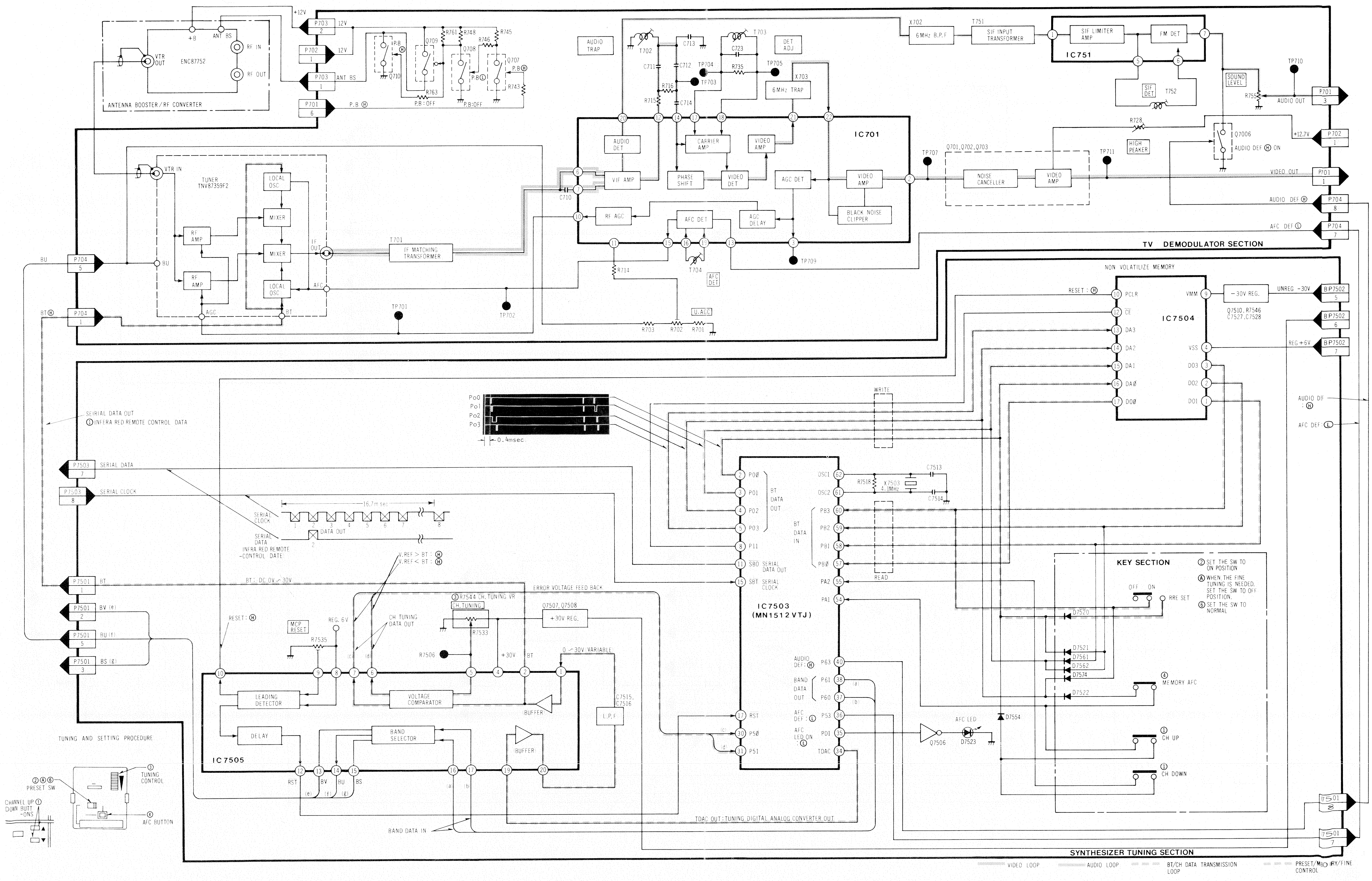


ANTENNA BOOSTER/RF CONVERTER
ENC87751
VTR OUT
RF IN
RF OUT
+B
GND
+12V
BP703 2
P702 2
BP703 3
12V
ANT BS
VTR IN
TUNER TNV77759F2
LOCAL OSC
MIXER
RF AMP
AGC
BT
AFC
IF
T701
IF MATCHING TRANSFORMER
BV Ⓗ
BU Ⓗ
BS Ⓗ
P704
TP701
TP702
AUDIO TRAP
T702
C713
C711
C712
TP704
TP703
C727
R735
T703
TP705
DET ADJ
X703
6MHz TRAP
R716
R715
C714
C710
AUDIO DET
VIF AMP
RF AGC
CARRIER AMP
VIDEO AMP
PHASE SHIFT
VIDEO DET
AGC DET
AFC DET
AGC DELAY
BLACK NOISE CLIPPER
IC701
R714
D704
RF AGC
R704
R705
R706
R703
R702
R701
D701
U.AGC
T704
AFC DET
TP709
X702
6MHz B.P.F
T751
SIF INPUT TRANSFORMER
SIF LIMITER AMP
FM DET
IC751
SIF DET
T752
SOUND LEVEL
R755
AUDIO OUT
P701
TP710
R728
HIGH PEAKER
Q7006
AUDIO DEF Ⓗ ON
+12V
TP707
Q701,Q702,Q703
NOISE CANCELLER
TP711
VIDEO OUT
AUDIO DEF Ⓗ
AFC DEF Ⓛ
TV DEMODULATOR SECTION
NON VOLATILIZE MEMORY
RESET : Ⓗ
PCLR
CE
DA3
DA2
DA1
DAØ
DOØ
VMM
VSS
DO3
DO2
DO1
IC7504
-30V REG.
Q7510,R7546
C7527,C7528
UNREG -30V
UNREG 45V
REG +6V
BP7502
AUDIO DEF : Ⓗ
AFC DEF : Ⓛ
WRITE
READ
Po0
Po1
Po2
Po3
0.4msec
SEIRIAL DATA OUT
Ⓘ INFERA RED REMOTE CONTROL DATA
P7503
SERIAL DATA
SERIAL CLOCK
16.7m sec
SERIAL CLOCK
SERIAL DATA
DATA OUT
INFRA RED REMOTE -CONTROL DATE
V.REF > BT : Ⓗ
V.REF < BT : Ⓗ
P7501
BT
BT : DC 0V ~ 30V
ERROR VOLTAGE FEED BACK
POØ
PO1
PO2
PO3
P11
SBO SERIAL DATA OUT
SBT SERIAL CLOCK
BT DATA OUT
BT DATA IN
OSC1
OSC2
R7518
X7503 4.1MHz
C7513
C7514
PB3
PB2
PB1
PBØ
PA3
PA2
PA1
IC7503 (MN1512VTJ)
AUDIO DEF : Ⓗ
BAND DATA OUT
AFC DEF : Ⓛ
AFC LED ON : Ⓛ
P63
P61
P60
P53
PD1
TDAC
RST
P5Ø
P51
AFC LED
Q7506
D7523
RESET : Ⓗ
MCP RESET
R7535
REG. 6V
CH TUNING DATA OUT
④ R7544 CH. TUNING VR
CH. TUNING
R7533
R7506
Q7507,Q7508
+30V REG.
+30V
0 ~ 30V (VARIABLE)
LEADING DETECTOR
VOLTAGE COMPARATOR
BUFFER
DELAY
BAND SELECTOR
C7515, C7516
L.P.F
IC7505
RST
BVⒽ
BUⒽ
BSⒽ
TDAC OUT : TUNING DIGITAL ANALOG CONVERTER OUT
BAND DATA IN
KEY SECTION
⑦ SET THE SW TO ON POSITION
Ⓐ WHEN THE FINE TUNING IS NEEDED, SET THE SW TO OFF POSITION.
Ⓑ SET THE SW TO NORMAL
OFF ON
PRE SET
③ BAND
⑤ MEMORY AFC
① CH UP
⑦ FINE DOWN
① CH DOWN
⑦ FINE UP
D7520
D7521
D7561
D7562
D7574
D7522
D7554
SYNTHESIZER TUNING SECTION
TUNING AND SETTING PROCEDURE
③ BAND SW
④ TUNING CONTROL
②④⑥ PRESET SW
CHANNEL UP ① DOWN BUTT -ONS
⑤ AFC BUTTON
⑦ FINE TUNING UP DOWN BUTTONS
VIDEO LOOP
AUDIO LOOP
BT/CH DATA TRANSMISSION LOOP
PRESET/MEMORY/FINE CONTROL

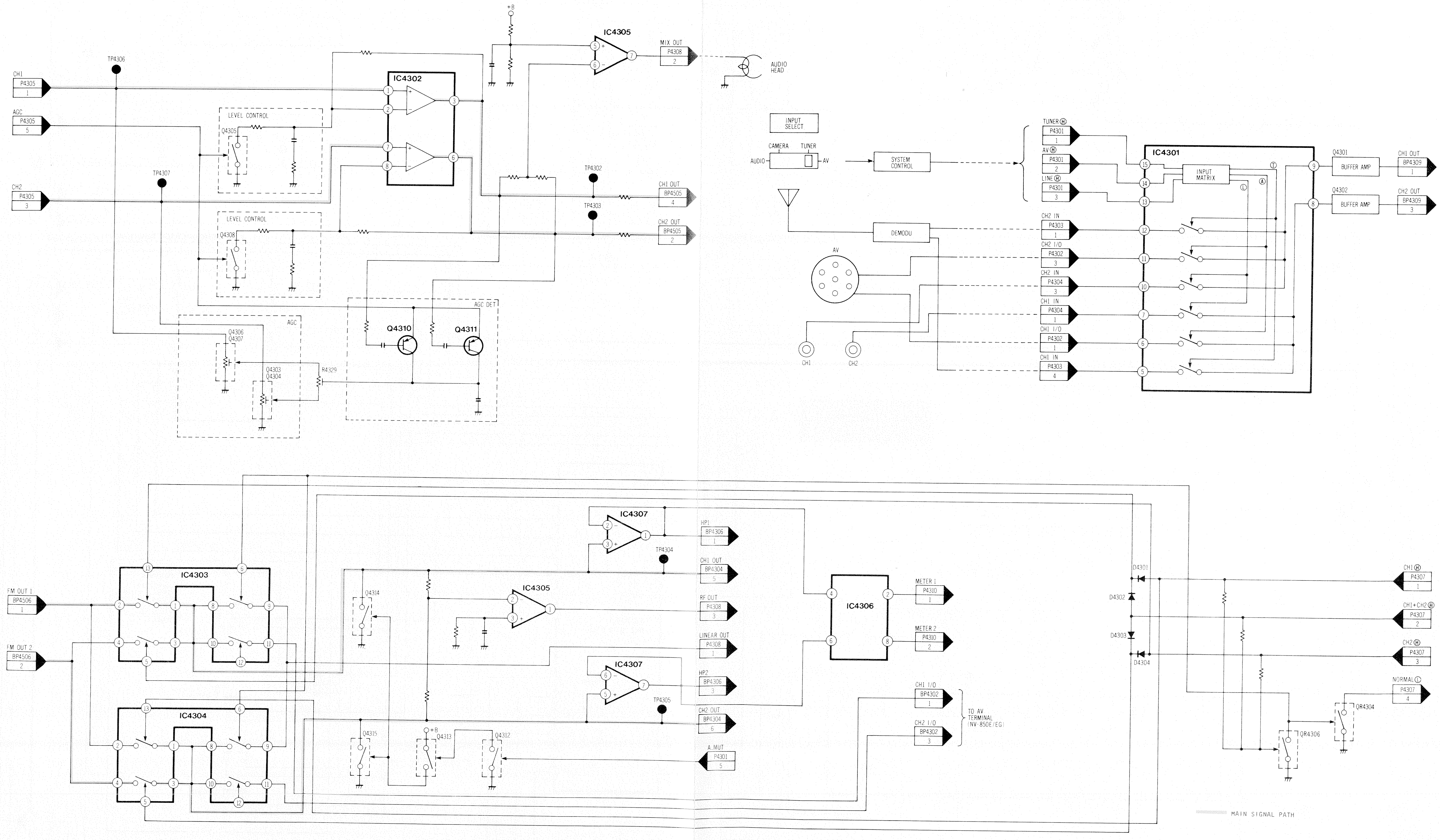
	U	VH	VL
IC7505 ⑯	L	H	H
IC7505 ⑰	H	H	L

Back Page:
TUNER/DEMODU Section

Ⓑ TUNER/DEMODU BLOCK DIAGRAM (NV-850B)

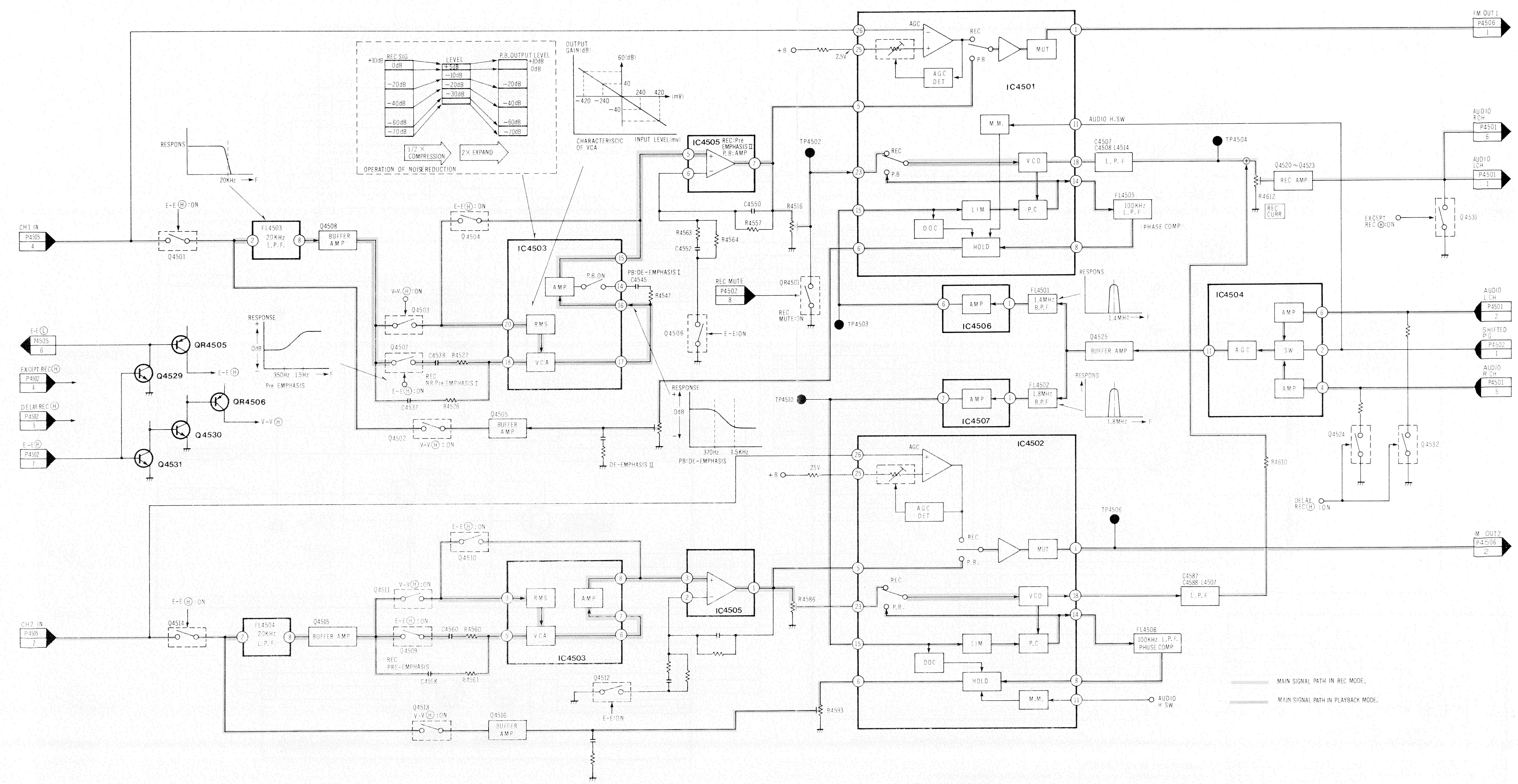

ANTENNA BOOSTER / RF CONVERTER
ENC87752
VTR OUT
RF IN
RF OUT
ANT BS
+B
+12V
P703 2 12V
P702 1 12V
P703 1 ANT BS
P701 6 P.B Ⓗ
Q710 P.B Ⓗ
Q709
Q708 P.B Ⓛ
Q707 P.B Ⓗ
R761 R748 R746 R745 R743 R763
P.B : OFF
TUNER TNV87359F2
VTR IN
RF AMP
MIXER
LOCAL OSC
IF OUT
AFC
AGC
BT
BU
T701 IF MATCHING TRANSFORMER
TP701
TP702
P704 5 BU
P704 1 BT Ⓗ
AUDIO TRAP
T702
C711 C712 C713 C714 C723 C710
TP703 TP704 TP705
R715 R716 R735 R714
T703
DET ADJ
X703 6MHz TRAP
AUDIO DET
CARRIER AMP
VIDEO AMP
VIF AMP
PHASE SHIFT
VIDEO DET
AGC DET
VIDEO AMP
RF AGC
AFC DET
AGC DELAY
BLACK NOISE CLIPPER
IC701
T704
AFC DET
U.AGC
R703 R702 R701
TP709
TP707
Q701,Q702,Q703
NOISE CANCELLER
VIDEO AMP
TP711
X702 6MHz B.P.F
T751 SIF INPUT TRANSFORMER
SIF LIMITER AMP
FM DET
IC751
SIF DET
T752
R728
HIGH PEAKER
SOUND LEVEL
R755
TP710
AUDIO OUT
P701 3
Q7006 AUDIO DEF Ⓗ ON
+12.7V
P702 1
VIDEO OUT
P701 1
AUDIO DEF Ⓗ
P704 8
AFC DEF Ⓛ
P704 7
TV DEMODULATOR SECTION
NON VOLATILIZE MEMORY
RESET : Ⓗ
PCLR CE DA3 DA2 DA1 DAØ DOØ
VMM VSS DO3 DO2 DO1
IC7504
−30V REG.
UNREG −30V
Q7510, R7546 C7527, C7528
BP7502 5
BP7502 6
REG +6V
BP7502 7
AUDIO DEF : Ⓗ
AFC DEF : Ⓛ
PoØ Po1 Po2 Po3
0.4msec
WRITE
READ
SERIAL DATA OUT
Ⓛ INFERA RED REMOTE CONTROL DATA
P7503 7 SERIAL DATA
P7503 8 SERIAL CLOCK
16.7m sec
SERIAL CLOCK
SERIAL DATA
INFRA RED REMOTE -CONTROL DATE
DATA OUT
POØ PO1 PO2 PO3 P11
BT DATA OUT
SBO SERIAL DATA OUT
SBI SERIAL CLOCK
OSC1 OSC2
R7518
X7503 4.1MHz
C7513 C7514
P83 P82 P81 P8Ø
BT DATA IN
PA2 PA1
AUDIO DEF : Ⓗ P63
BAND DATA OUT P61 P60
AFC DEF : Ⓛ P53
AFC LED ON : Ⓛ PDI
TDAC
RST P5Ø P51
IC7503 (MN1512VTJ)
Q7506
AFC LED D7523
D7554
KEY SECTION
OFF ON
PRE SET
D7520 D7521 D7561 D7562 D7574 D7522
④ MEMORY AFC
① CH UP
① CH DOWN
② SET THE SW TO ON POSITION
Ⓐ WHEN THE FINE TUNING IS NEEDED, SET THE SW TO OFF POSITION.
⑤ SET THE SW TO NORMAL
P7501 1 BT
P7501 2 BV (e)
P7501 5 BU (f)
P7501 3 BS (g)
BT : DC 0V ~ 30V
V.REF > BT : Ⓗ
V.REF < BT : Ⓗ
RESET : Ⓗ
MCP RESET
REG. 6V
R7535
CH TUNING DATA OUT
③ R7544 CH. TUNING VR
CH. TUNING
R7533
R7506
+30V
Q7507, Q7508
+30V REG.
ERROR VOLTAGE FEED BACK
0 ~ 30V VARIABLE
LEADING DETECTOR
VOLTAGE COMPARATOR
BUFFER
C7515, C7516
L.P.F
DELAY
BAND SELECTOR
IC7505
RST BV BU BS
BAND DATA IN
TDAC OUT : TUNING DIGITAL ANALOG CONVERTER OUT
P7501 8
P7501 7
SYNTHESIZER TUNING SECTION
TUNING AND SETTING PROCEDURE
②Ⓐ⑤ PRESET SW
③ TUNING CONTROL
CHANNEL UP ① DOWN BUTT -ONS
④ AFC BUTTON
VIDEO LOOP
AUDIO LOOP
BT/CH DATA TRANSMISSION LOOP
PRESET/MEMORY/FINE CONTROL

Ⓒ FM AUDIO SUB BLOCK DIAGRAM

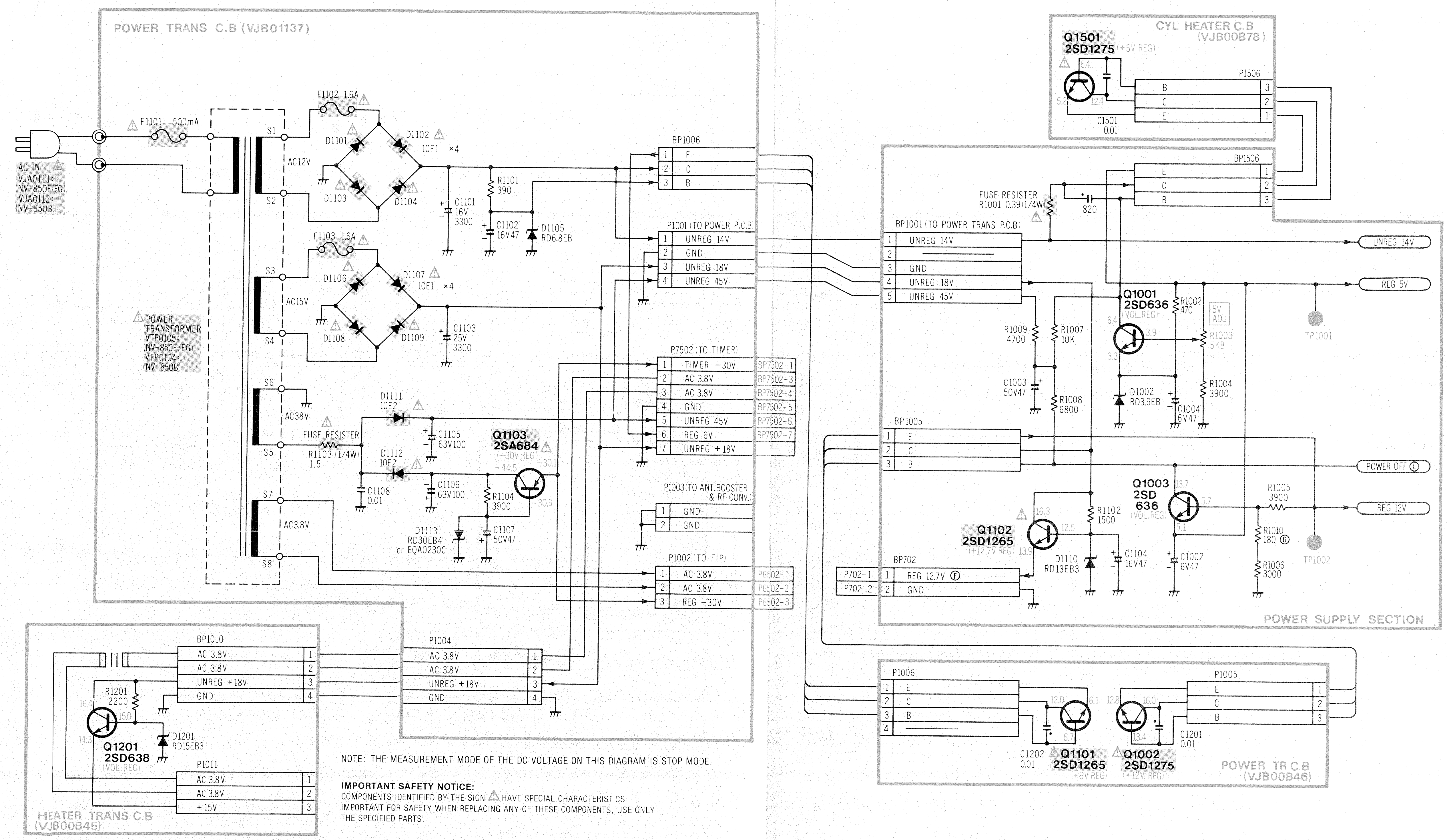

IC4305
IC4302
IC4301
IC4303
IC4304
IC4306
IC4307
CH1 P4305 1
AGC P4305 5
CH2 P4305 3
TP4306
TP4307
TP4302
TP4303
TP4304
TP4305
LEVEL CONTROL
Q4305
Q4308
AGC
AGC DET
Q4306 Q4307
Q4303 Q4304
R4329
Q4310
Q4311
+B
MIX OUT P4308 2
AUDIO HEAD
CH1 OUT BP4505 4
CH2 OUT BP4505 2
INPUT SELECT
CAMERA
TUNER
AUDIO
AV
SYSTEM CONTROL
DEMODU
CH1
CH2
TUNER Ⓗ P4301 1
AV Ⓗ P4301 2
LINE Ⓗ P4301 3
CH2 IN P4303 1
CH2 I/O P4302 3
CH2 IN P4304 3
CH1 IN P4304 1
CH1 I/O P4302 1
CH1 IN P4303 4
INPUT MATRIX
Ⓣ
Ⓐ
Ⓛ
Q4301 BUFFER AMP
Q4302 BUFFER AMP
CH1 OUT BP4309 1
CH2 OUT BP4309 3
FM OUT 1 BP4506 1
FM OUT 2 BP4506 2
Q4314
Q4315
Q4313
Q4312
HP1 BP4306 1
CH1 OUT BP4304 5
RF OUT P4308 3
LINEAR OUT P4308 1
HP2 BP4306 3
CH2 OUT BP4304 6
A.MUT P4301 5
METER 1 P4310 1
METER 2 P4310 2
CH1 I/O BP4302 1
CH2 I/O BP4302 3
TO AV TERMINAL (NV-850E/EG)
D4301
D4302
D4303
D4304
CH1 Ⓗ P4307 1
CH1+CH2 Ⓗ P4307 2
CH2 Ⓗ P4307 3
NORMAL Ⓛ P4307 4
QR4304
QR4306
MAIN SIGNAL PATH

Back Page:
TUNER/DEMODU Section

Ⓓ FM AUDIO MAIN BLOCK DIAGRAM


CH1 IN
P4505
E-E Ⓗ : ON
Q4501
FL4503
20KHz
L.P.F.
Q4508
BUFFER AMP
RESPONS
20KHz
OPERATION OF NOISE REDUCTION
REC SIG.
LEVEL
P.B.OUTPUT LEVEL
1/2 × COMPRESSION
2× EXPAND
OUTPUT GAIN(dB)
CHARACTERISCIC OF VCA
INPUT LEVEL(mV)
IC4505
REC:Pre EMPHASIS Ⅱ
P.B.:AMP
IC4503
RMS
VCA
AMP
P.B.ON
PB:DE-EMPHASIS Ⅰ
C4545
R4547
Q4504
V-V Ⓗ : ON
Q4503
Q4507
C4538
R4527
REC
NR Pre EMPHASIS Ⅰ
C4537
R4526
RESPONSE
0dB
350Hz
1.5Hz
Pre EMPHASIS
Q4502
Q4505
BUFFER AMP
DE-EMPHASIS Ⅱ
370Hz
1.5KHz
PB:DE-EMPHASIS
E-E Ⓛ
EXCEPT REC Ⓗ
DELAY REC Ⓗ
E-E Ⓗ
QR4505
Q4529
QR4506
V-V Ⓗ
Q4530
Q4531
C4550
R4557
R4516
R4563
R4564
C4552
REC MUTE
P4502
QR4501
REC MUTE:ON
Q4506
E-E:ON
TP4502
TP4503
TP4510
+B
2.5V
AGC
AGC DET
REC
P.B
MUT
IC4501
M.M.
AUDIO H.SW
VCO
LIM
P.C
DOC
HOLD
C4507
C4508 L4514
L.P.F
FL4505
100KHz L.P.F
PHASE COMP
TP4504
Q4520~Q4523
REC AMP
R4612
REC CURR
FM OUT 1
P4506
AUDIO R.CH
P4501
AUDIO L.CH
EXCEPT REC Ⓗ:ON
Q4531
IC4506
AMP
FL4501
1.4MHz B.P.F
RESPONS
1.4MHz
Q4525
BUFFER AMP
IC4507
FL4502
1.8MHz B.P.F
1.8MHz
IC4504
AGC
SW
SHIFTED P.B.
Q4524
Q4532
R4610
DELAY REC Ⓗ:ON
IC4502
TP4506
FM OUT 2
P4506
CH2 IN
Q4514
FL4504
20KHz
L.P.F.
Q4515
BUFFER AMP
Q4510
Q4511
Q4509
C4560
R4560
REC PRE-EMPHASIS
C4558
R4561
R4586
Q4512
E-E:ON
Q4513
Q4516
R4593
C4587
C4588 L4507
FL4506
100KHz L.P.F.
PHASE COMP.
AUDIO H.SW
MAIN SIGNAL PATH IN REC MODE.
MAIN SIGNAL PATH IN PLAYBACK MODE.

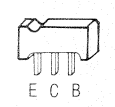
3-6. POWER SUPPLY SCHEMATIC DIAGRAM


POWER TRANS C.B (VJB01137)
AC IN
VJA0111: (NV-850E/EG), VJA0112: (NV-850B)
F1101 500mA
POWER TRANSFORMER VTP0105: (NV-850E/EG), VTP0104: (NV-850B)
S1
S2
S3
S4
S5
S6
S7
S8
AC12V
AC15V
AC38V
AC3.8V
F1102 1.6A
F1103 1.6A
D1101
D1102
10E1 ×4
D1103
D1104
D1106
D1107
10E1 ×4
D1108
D1109
C1101 16V 3300
R1101 390
C1102 16V47
D1105 RD6.8EB
C1103 25V 3300
D1111 10E2
D1112 10E2
FUSE RESISTER R1103 (1/4W) 1.5
C1105 63V100
C1106 63V100
C1108 0.01
Q1103 2SA684 (−30V REG)
−44.5
−30.1
−30.9
R1104 3900
D1113 RD30EB4 or EQA0230C
C1107 50V47
BP1006
1 E
2 C
3 B
P1001 (TO POWER P.C.B)
1 UNREG 14V
2 GND
3 UNREG 18V
4 UNREG 45V
P7502 (TO TIMER)
1 TIMER −30V
2 AC 3.8V
3 AC 3.8V
4 GND
5 UNREG 45V
6 REG 6V
7 UNREG +18V
BP7502-1
BP7502-3
BP7502-4
BP7502-5
BP7502-6
BP7502-7
P1003 (TO ANT.BOOSTER & RF CONV.)
1 GND
2 GND
P1002 (TO FIP)
1 AC 3.8V
2 AC 3.8V
3 REG −30V
P6502-1
P6502-2
P6502-3
BP1010
1 AC 3.8V
2 AC 3.8V
3 UNREG +18V
4 GND
P1004
1 AC 3.8V
2 AC 3.8V
3 UNREG +18V
4 GND
R1201 2200
16.4
15.0
14.3
Q1201 2SD638 (VOL.REG)
D1201 RD15EB3
P1011
1 AC 3.8V
2 AC 3.8V
3 +15V
HEATER TRANS C.B (VJB00B45)
CYL HEATER C.B (VJB00B78)
Q1501 2SD1275 (+5V REG)
6.4
5.2
12.4
C1501 0.01
P1506
3 B
2 C
1 E
BP1506
1 E
2 C
3 B
FUSE RESISTER R1001 0.39 (1/4W)
820
BP1001 (TO POWER TRANS P.C.B)
1 UNREG 14V
2
3 GND
4 UNREG 18V
5 UNREG 45V
UNREG 14V
REG 5V
Q1001 2SD636 (VOL.REG)
6.4
3.9
3.3
R1002 470
5V ADJ
R1003 5KB
R1004 3900
TP1001
R1009 4700
R1007 10K
C1003 50V47
R1008 6800
D1002 RD3.9EB
C1004 6V47
BP1005
1 E
2 C
3 B
POWER OFF Ⓛ
Q1003 2SD 636 (VOL.REG)
13.7
5.7
5.1
R1005 3900
REG 12V
R1010 180 Ⓖ
R1006 3000
TP1002
C1002 6V47
Q1102 2SD1265 (+12.7V REG)
16.3
12.5
13.9
R1102 1500
D1110 RD13EB3
C1104 16V47
BP702
P702-1
P702-2
1 REG 12.7V Ⓕ
2 GND
POWER SUPPLY SECTION
P1006
1 E
2 C
3 B
4
12.0
6.1
6.7
12.8
16.0
13.4
C1202 0.01
Q1101 2SD1265 (+5V REG)
Q1002 2SD1275 (+12V REG)
C1201 0.01
P1005
1 E
2 C
3 B
POWER TR C.B (VJB00B46)

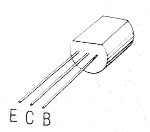
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SPECIFIED PARTS.

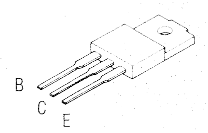
TRANSISTORs INFORMATION



2SD636
2SD638



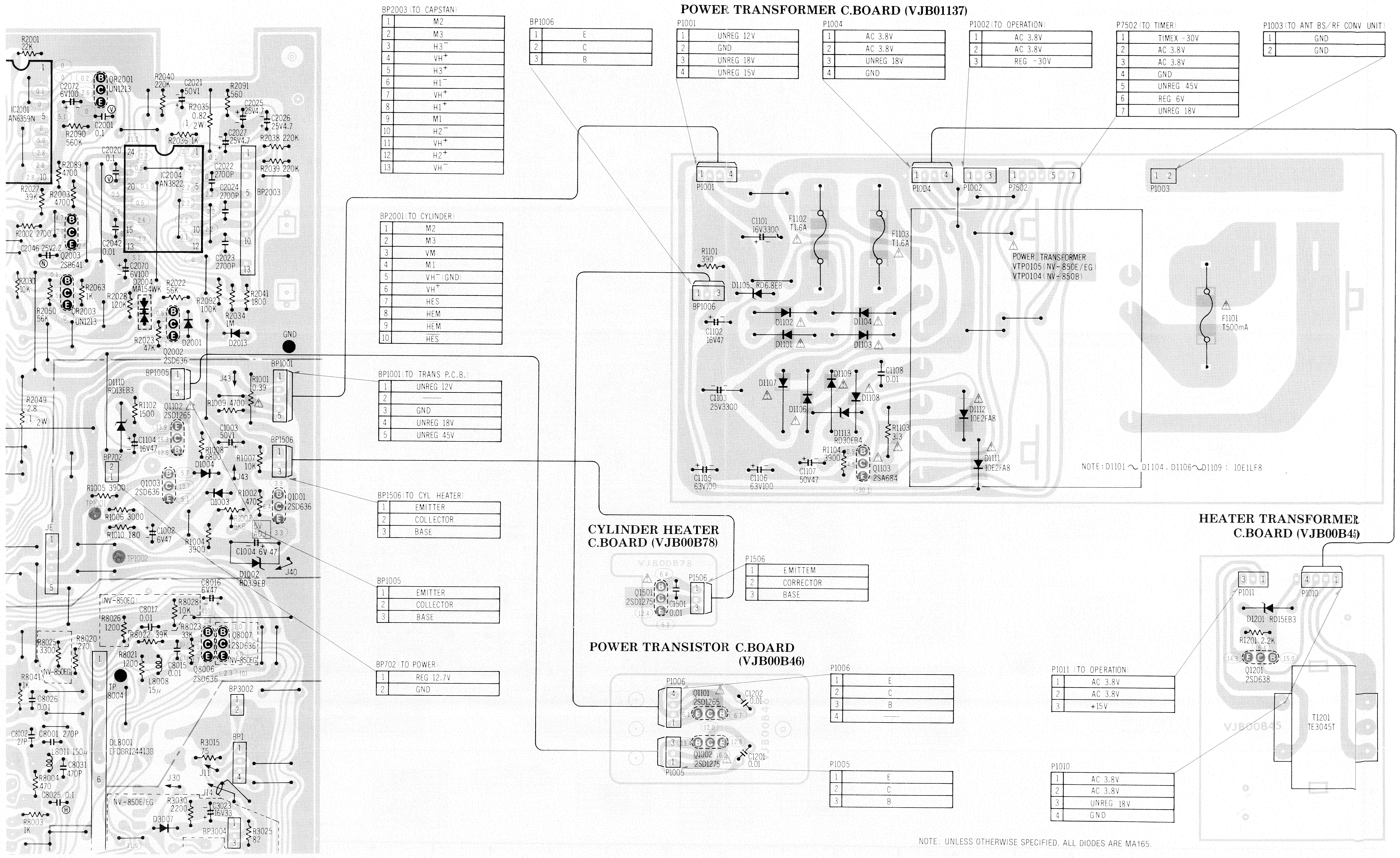
2SA684



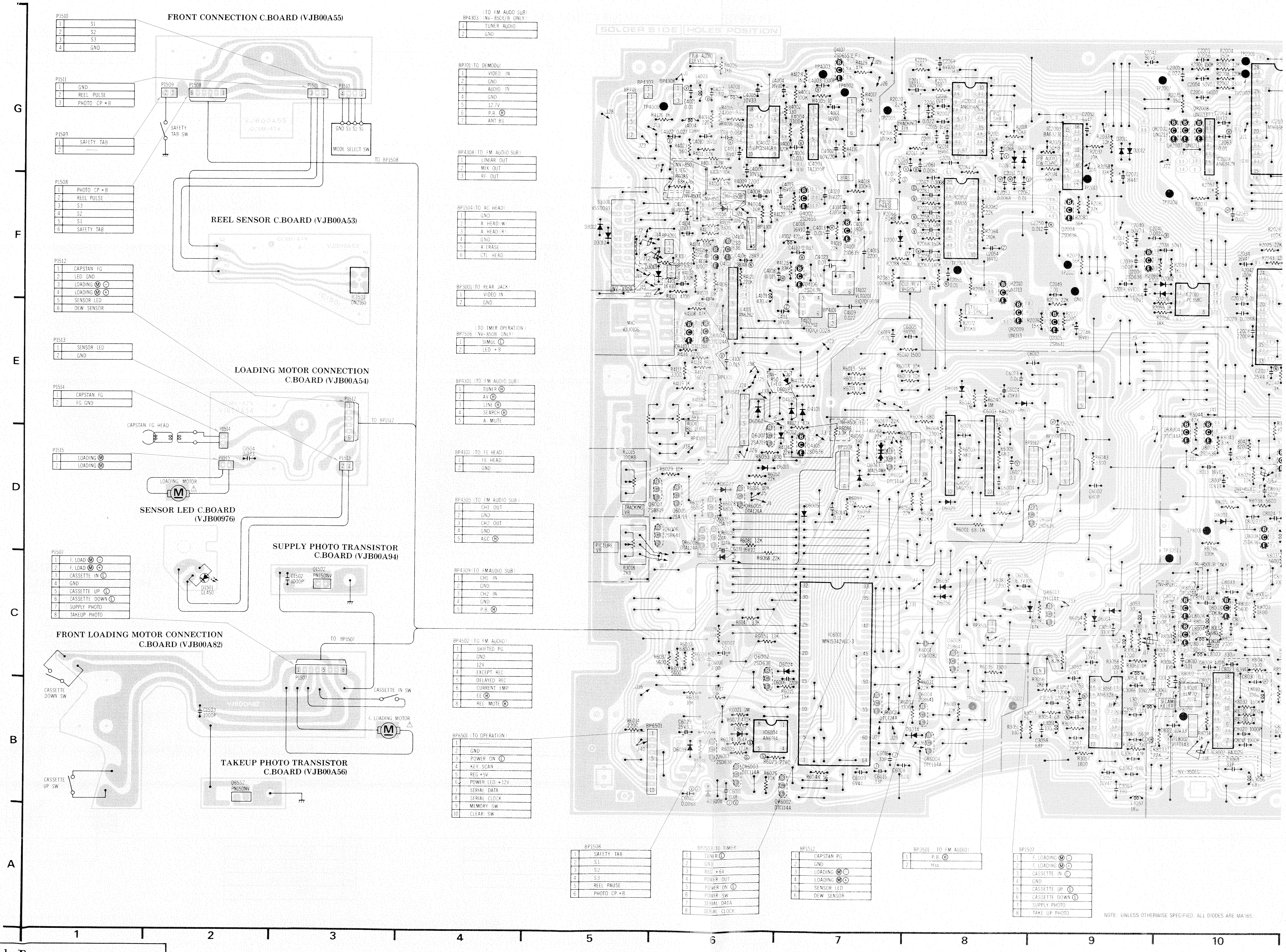
2SD1265
2SD1275

Back Page:
FM AUDIO MAIN Section

3-7. POWER SUPPLY Section In Main Circuit Board
(VEP03197A: NV-850EG/VEP03197B: NV-850B/VEP03197C/ NV-850E)


POWER TRANSFORMER C.BOARD (VJB01137)
CYLINDER HEATER C.BOARD (VJB00B78)
POWER TRANSISTOR C.BOARD (VJB00B46)
HEATER TRANSFORMER C.BOARD (VJB00B45)
BP2003 (TO CAPSTAN)
1 M2
2 M3
3 H3−
4 VH+
5 H3+
6 H1−
7 VH+
8 H1+
9 M1
10 H2−
11 VH+
12 H2+
13 VH−
BP1006
1 E
2 C
3 B
P1001
1 UNREG 12V
2 GND
3 UNREG 18V
4 UNREG 15V
P1004
1 AC 3.8V
2 AC 3.8V
3 UNREG 18V
4 GND
P1002 (TO OPERATION)
1 AC 3.8V
2 AC 3.8V
3 REG −30V
P7502 (TO TIMER)
1 TIMEX −30V
2 AC 3.8V
3 AC 3.8V
4 GND
5 UNREG 45V
6 REG 6V
7 UNREG 18V
P1003 (TO ANT BS/RF CONV UNIT)
1 GND
2 GND
BP2001 (TO CYLINDER)
1 M2
2 M3
3 VM
4 M1
5 VH− (GND)
6 VH+
7 HES
8 HEM
9 HEM
10 HES
BP1001 (TO TRANS P.C.B.)
1 UNREG 12V
2 ——
3 GND
4 UNREG 18V
5 UNREG 45V
BP1506 (TO CYL HEATER)
1 EMITTER
2 COLLECTOR
3 BASE
BP1005
1 EMITTER
2 COLLECTOR
3 BASE
BP702 (TO POWER)
1 REG 12.7V
2 GND
P1506
1 EMITTEM
2 CORRECTOR
3 BASE
P1006
1 E
2 C
3 B
4 ——
P1005
1 E
2 C
3 B
P1011 (TO OPERATION)
1 AC 3.8V
2 AC 3.8V
3 +15V
P1010
1 AC 3.8V
2 AC 3.8V
3 UNREG 18V
4 GND
POWER TRANSFORMER VTP0105 (NV−850E/EG) VTP0104 (NV−850B)
F1101 T500mA
F1102 T1.6A
F1103 T1.6A
T1201 TE3045T
IC2001 AN6359N
IC2004 AN3822
NOTE: D1101 ~ D1104, D1106 ~ D1109 : 10E1LF8
NOTE: UNLESS OTHERWISE SPECIFIED, ALL DIODES ARE MA165.

3-8. SYSTEM CONTROL Section In Main Circuit Board (VEP03197A: NV-850EG/VEP03197B: NV-850B/VEP03197C: NV-850E)


FRONT CONNECTION C.BOARD (VJB00A55)
REEL SENSOR C.BOARD (VJB00A53)
LOADING MOTOR CONNECTION C.BOARD (VJB00A54)
SENSOR LED C.BOARD (VJB00976)
SUPPLY PHOTO TRANSISTOR C.BOARD (VJB00A94)
FRONT LOADING MOTOR CONNECTION C.BOARD (VJB00A82)
TAKEUP PHOTO TRANSISTOR C.BOARD (VJB00A56)
SOLDER SIDE
HOLES POSITION
SAFETY TAB SW
MODE SELECT SW
CAPSTAN FG HEAD
LOADING MOTOR
CASSETTE DOWN SW
CASSETTE UP SW
CASSETTE IN SW
F. LOADING MOTOR
IC6001 MN15342VQD-3
IC6004
NOTE: UNLESS OTHERWISE SPECIFIED, ALL DIODES ARE MA165.
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

SYSTEM CONTROL CIRCUIT BOARD	
Transistor	
Q1502	C-3
Q6001	D-9
Q6002	C-6
Q6003	D-6
Q6005	D-6
Q6006	D-6
Q6007	D-6
Q6008	C-8
Q6009	D-6
Q6012	B-6
Q6552	B-2
Transistor & Resistor	
QR6001	B-7
QR6002	B-7
QR6003	B-6
QR6004	B-8
QR6005	D-6
QR6006	D-6
QR6008	D-6
QR6012	D-7
QR6013	B-9
Integrated Circuit	
IC6001	C-7
IC6002	D-8
IC6003	D-8
IC6004	B-6
Test Point	
TP6001	B-8
TP6002	B-8

ADDRESS INFORMATION

Back Page:
POWER SUPPLY Section

SYSTEM CONTROL ICs D.C. VOLTAGE CHART

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	4.9	4.9	0	4.1	0	0	0	0	3.7	5.0	4.9	4.7	0.5	4.8	4.9	2.7	0	0.2	3.0
PLAY	0	4.9	4.9	0	4.1	0	0	0	0	3.7	5.0	4.7	4.7	0.5	4.7	4.9	2.7	2.5	2.5	3.0
REC	0	4.9	4.9	0	4.1	0	0	0	0	3.7	5.0	4.9	4.7	0.5	4.8	4.9	2.7	2.5	2.5	3.0
F.F	0	4.9	4.9	0	4.1	0	0	0	0	3.7	5.0	4.9	4.7	0.5	4.9	4.9	2.7	0	2.2	3.0
REW	0	4.9	4.9	0	4.1	0	0	0	0	3.7	5.0	4.9	4.7	0.5	4.8	4.9	2.7	0	2.2	3.0

REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	39	31	32	33	34	35	36	37	38	39	40
STOP	3.0	0.1	0	0	5.1	4.2	4.8	0	0.5	4.9	4.9	0	0	0.1	0.2	0.1	0.1	0.2	0.1	0.1
PLAY	3.0	0.1	0	0	5.1	0	0	5.0	0.5	4.9	4.9	0	0	4.9	0.2	0.1	0.1	4.9	0.1	0.1
REC	3.0	0.1	0	0	5.1	0	0	5.0	0.5	4.9	4.9	0	0	4.9	0.2	0.1	0.1	4.9	0.1	0.1
F.F	3.0	0.1	0	0	5.1	4.8	4.8	0	0.5	4.9	4.9	0	0	0.2	0.2	4.8	0.1	4.8	0	4.8
REW	3.0	0.1	0	0	5.1	4.7	4.8	0	0.5	4.9	4.9	0	0	0.2	0.2	4.8	0.1	4.8	4.8	4.8

REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0.1	0.1	12.3	12.3	4.7	0	4.9	0.1	0.1	4.9	0.1	0.1	0.2	4.8	4.9	4.9	0.1	4.3	4.5	0.2
PLAY	0.1	0.1	12.3	12.3	4.7	4.9	4.9	0.1	0.1	4.9	0.1	0.1	0.2	4.8	4.9	0.1	0.1	4.3	4.5	0.2
REC	0.1	0.2	0.3	0.3	4.7	4.9	4.9	0.1	0.1	4.9	0.1	0.1	0.2	4.8	4.9	0.1	0.1	4.3	4.5	0.2
F.F	0	12.3	12.3	12.2	4.7	4.9	4.9	0	0	4.9	0.1	0	0.7	4.8	4.9	4.9	0.1	4.3	4.4	0.1
REW	0	12.3	12.2	12.2	4.7	4.9	4.9	0	0	4.9	0.1	0	0.7	4.8	4.9	4.9	0.1	4.3	4.4	0.1

REF. NO.	IC6001			
MODE	61	62	63	64
STOP	0.1	2.1	2.3	4.9
PLAY	0.1	2.1	2.3	4.9
REC	0.1	2.1	2.3	4.9
F.F	0	2.1	2.2	4.9
REW	0	2.1	2.2	4.9

REF. NO.	IC6002									
MODE	1	2	3	4	5	6	7	8	9	10
STOP	0	0.5	0.9	10.3	0	0	12.4	12.2	0.9	0.5
PLAY	0	0.5	0.9	10.3	0	0	12.4	11.8	0.9	0.5
REC	0	0.5	0.9	10.3	0	0	12.4	11.9	0.9	0.5
F.F	0	0.5	0.9	10.3	0	0	12.4	11.9	0.9	0.5
REW	0	0.5	0.9	10.3	0	0	12.4	11.9	0.9	0.5

REF. NO.	IC6003												IC6004							
MODE	1	2	3	4	5	6	7	8	9	10			1	2	3	4	5	6	7	8
STOP	0	0.5	0.9	5.7	0	0.5	12.4	11.8	0.9	0.5			4.9	0	2.4	0	0	0.4	0	5.1
PLAY	0	0.5	0.9	5.7	0	0.5	12.4	11.8	0.9	0.5			4.9	0	2.4	0	0	0.4	0	5.1
REC	0	0.5	0.9	5.7	0	0.4	12.4	11.8	0.9	0.5			4.9	0	2.4	0	0	0.4	0	5.1
F.F	0	0.5	0.9	5.7	0	0.5	12.4	11.8	0.9	0.5			4.9	0	2.4	0	0	0.4	0	5.1
REW	0	0.5	0.9	5.7	0	0.5	12.4	11.8	0.9	0.5			4.9	0	2.4	0	0	0.4	0	5.1

SYSTEM CONTROL TRANSISTORs DC VOLTAGE CHART

REF. NO.	Q6001			Q6002			Q6003			Q6004			Q6005			Q6006		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0.1	12.2	0.2	0	4.7	0.2	12.4	12.4	11.7	12.5	12.5	11.8	12.4	0	12.4	12.4	0.3	12.4
PLAY	0.2	11.8	0.2	0	4.7	0.2	12.4	12.4	11.7	12.5	12.5	11.8	12.4	0	12.4	12.4	0.3	12.4
REC	0.2	11.8	0.2	0	4.7	0.2	12.4	12.4	11.7	12.5	12.5	11.8	12.3	12.1	11.5	12.3	12.1	11.4
F.F	0.7	11.0	0.7	0	4.7	0.2	12.4	12.4	11.7	12.5	12.5	11.8	12.4	0	12.4	12.4	0.3	12.4
REW	0.7	11.0	0.7	0	4.7	0.2	12.4	12.4	11.7	12.5	12.5	11.8	12.4	0	12.4	12.4	0.3	12.4

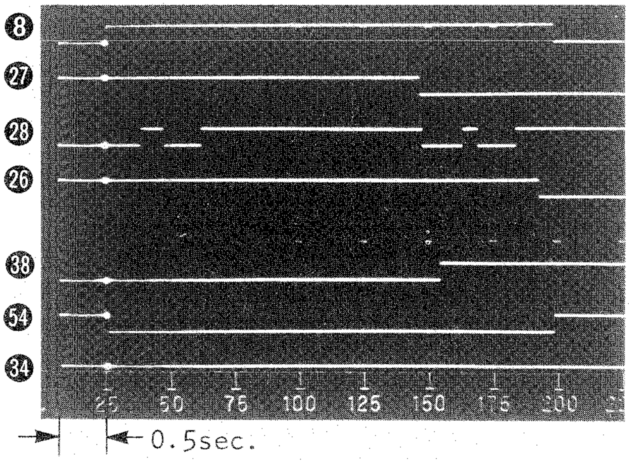
REF. NO.	Q6007			Q6008			Q6009			Q6012		
MODE	E	C	B	E	C	B	E	C	B	E	C	B
STOP	5.1	5.0	4.3	5.1	0	4.9	5.1	0	5.0	0	4.9	0
PLAY	5.1	5.0	4.3	5.1	5.0	1.4	5.1	0	5.0	0	4.9	0
REC	5.1	0	4.8	5.1	0	4.9	5.1	0	5.0	0	4.9	0
F.F	5.1	5.0	4.3	5.1	0	4.9	5.1	0	5.0	0	4.9	0
REW	5.1	5.0	4.3	5.1	0	4.9	5.1	0	5.0	0	4.9	0

REF. NO.	QR6001			QR6002			QR6003			QR6004			QR6005			QR6006		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0.1	4.8	0	0	4.5	0	0	4.3	0	13.8	0.1	5.1	0	4.9	5.1	5.0	0.1
PLAY	0	0.1	4.8	0	0	4.5	0	0	4.3	0	13.8	0.1	5.1	0	4.9	5.1	0	4.9
REC	0	0.1	4.8	0	0	4.5	0	0	4.3	0	13.8	0.1	5.1	5.0	0.1	5.1	5.0	0.1
F.F	0	0.1	4.8	0	0	4.5	0	0	4.3	0	13.8	0.1	5.1	0	4.9	5.1	5.0	0.1
REW	0	0.1	4.8	0	0	4.5	0	0	4.3	0	13.8	0.1	5.1	0	4.9	5.1	5.0	0.1

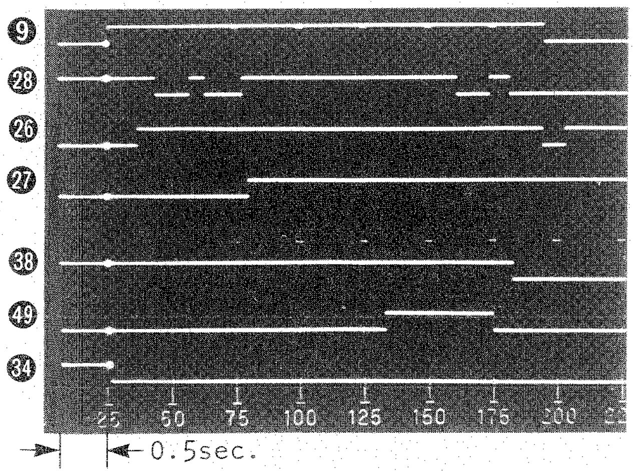
REF. NO.	QR6012			QR6013		
MODE	E	C	B	E	C	B
STOP	0.2	0.2	3.7	0	0.1	0.6
PLAY	4.9	4.7	4.8	0	0	2.7
REC	4.9	4.7	4.8	0	0.1	0.6
F.F	4.8	3.3	4.5	0	0.1	0.6
REW	4.8	3.3	4.5	0	0.1	0.6

MICROPROCESSOR (IC6001: MN15342VGC•3) MODE BY MODE TIMING CHART

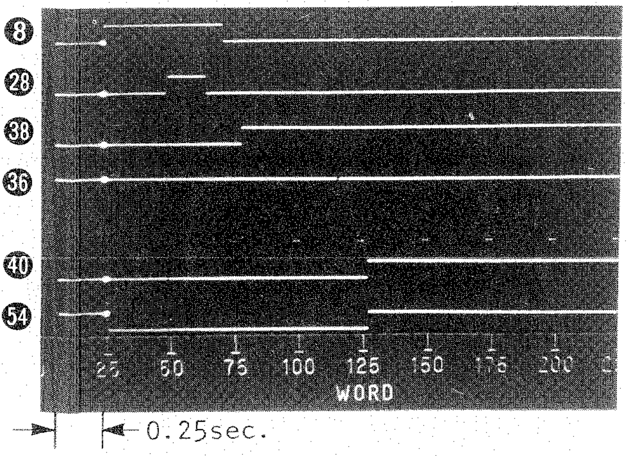
STOP → PLAY
IC Pin No.



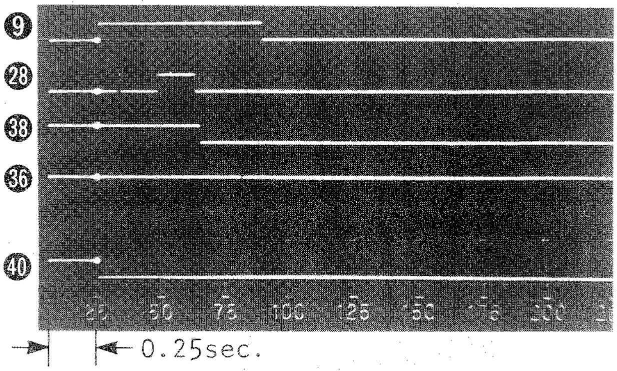
PLAY → STOP
IC Pin No.



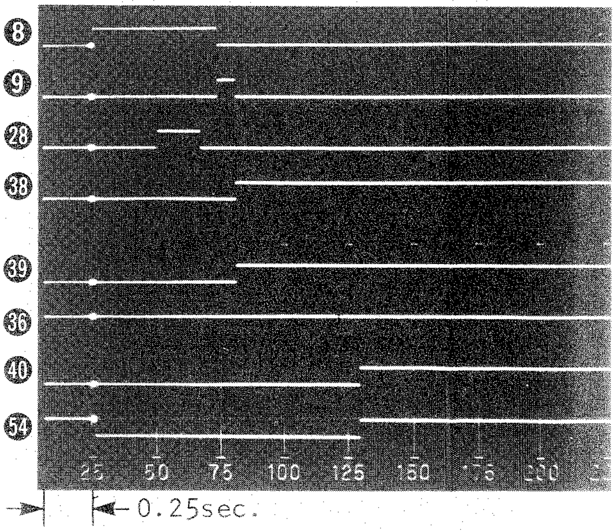
STOP → FF
IC Pin No.



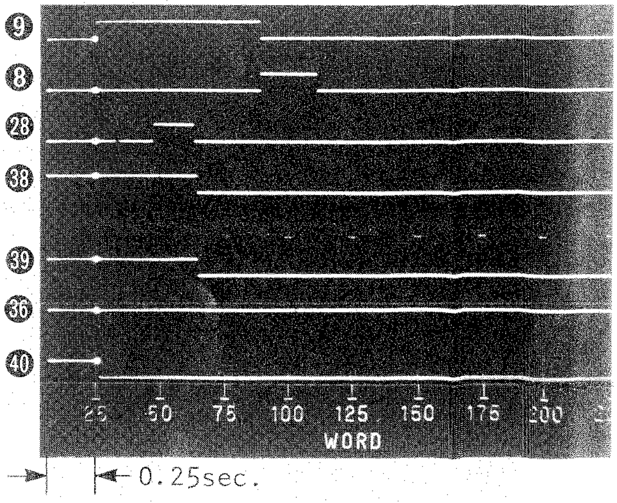
FF → STOP
IC Pin No.



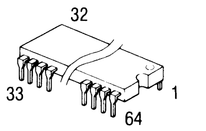
STOP → REW
IC Pin No.



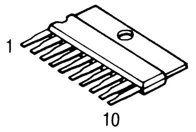
REW → STOP
IC Pin No.



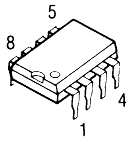
ICs & TRANSISTORs INFORMATION



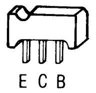
MN15342VGC



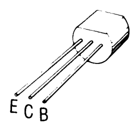
BA6209



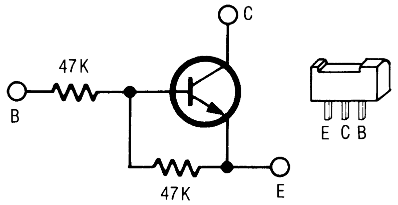
AN6914



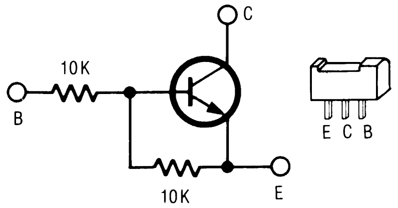
2SD636
2SB819
2SB641



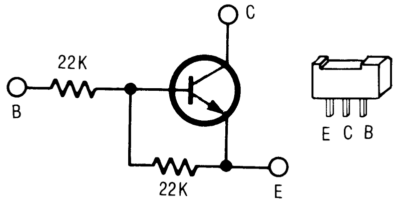
2SA719


C
47K
B
47K
E
E C B

DTC144A


C
10K
B
10K
E
E C B

DTC114A

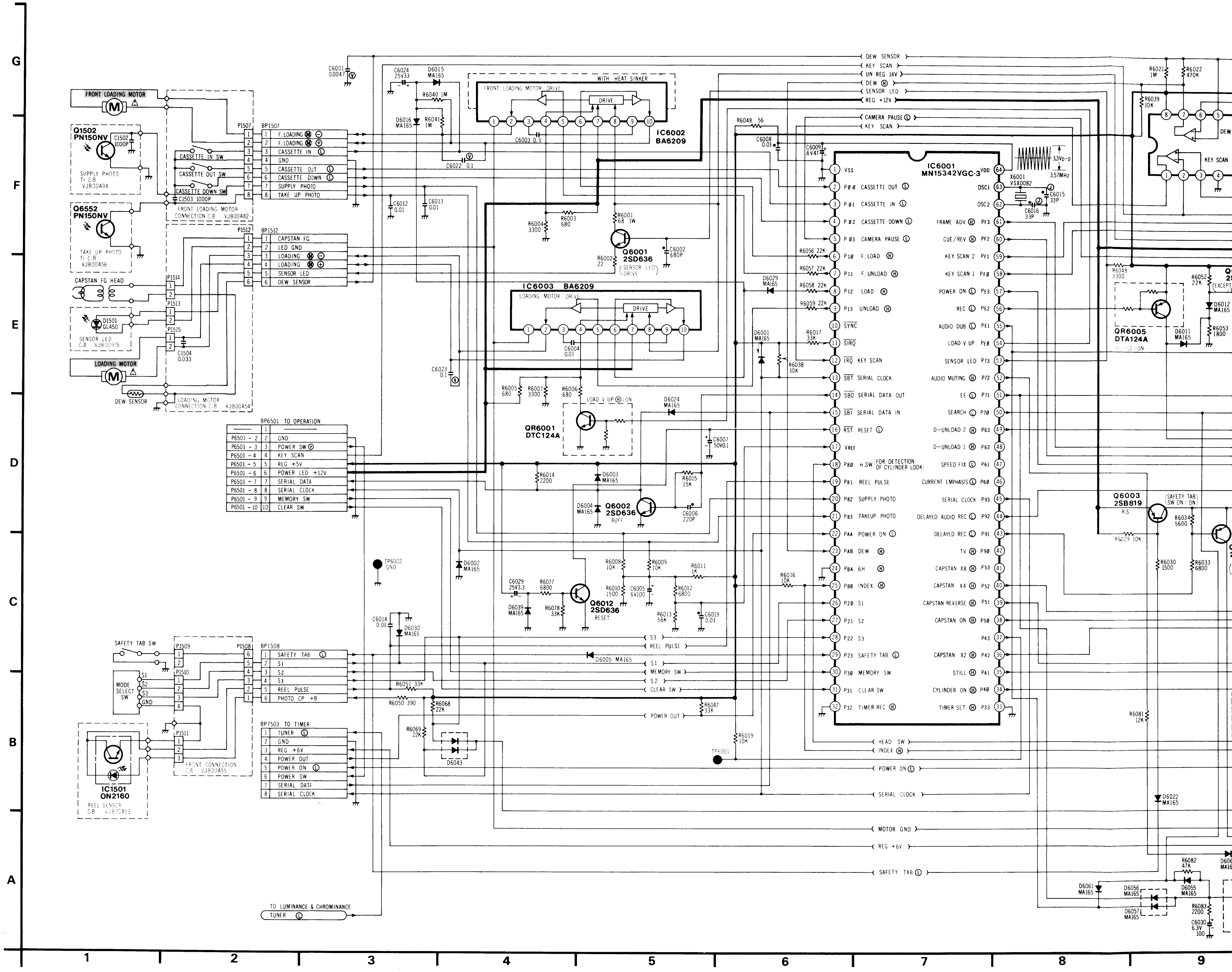

C
22K
B
22K
E
E C B

DTC124A

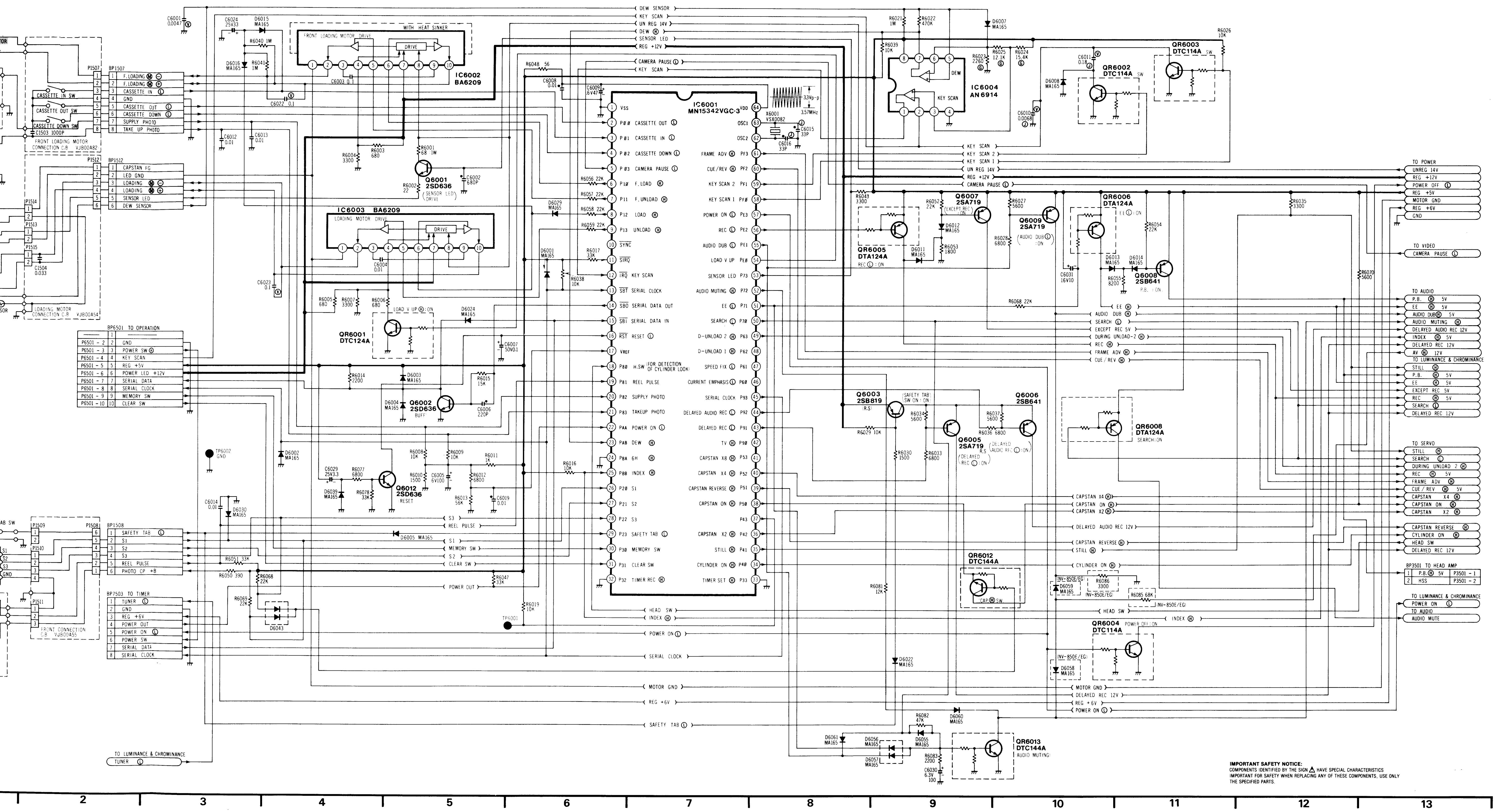
SYSTEM CONTROL SCHEMATIC	
Transistor	
Q1502	F-1
Q6001	E-5
Q6002	D-5
Q6003	D-9
Q6005	D-9
Q6006	D-10
Q6007	F-9
Q6008	E-11
Q6009	F-10
Q6012	C-5
Q6552	F-1
Transistor & Resistor	
QR6001	D-5
QR6002	F-10
QR6003	F-11
QR6004	B-11
QR6005	E-9
QR6006	E-10
QR6008	D-10
QR6012	B-9
QR6013	A-10
Integrated Circuit	
IC1501	B-1
IC6001	E-7
IC6002	G-4
IC6003	E-4
IC6004	F-9
Test Point	
TP6001	B-6
TP6002	C-3
Connector	
BP1507	F-2
BP1508	C-2
BP1512	F-2
BP3501	B-13
BP6501	D-2
BP7503	B-2

ADDRESS INFORMATION

3-9. SYSTEM CONTROL SCHEMATIC DIAGRAM


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
FRONT LOADING MOTOR
Q1502 PN150NV
SUPPLY PHOTO Tr C.B VJB00A94
Q6552 PN150NV
TAKE UP PHOTO Tr C.B VJB00A56
CAPSTAN FG HEAD
D1501 GL450
SENSOR LED C.B VJB00976
LOADING MOTOR
DEW SENSOR
CASSETTE IN SW
CASSETTE OUT SW
CASSETTE DOWN SW
C1503 1000P
FRONT LOADING MOTOR CONNECTION C.B VJB00A82
LOADING MOTOR CONNECTION C.B VJB00A54
C1504 0.033
P1507
BP1507
F. LOADING
CASSETTE IN
GND
CASSETTE OUT
CASSETTE DOWN
SUPPLY PHOTO
TAKE UP PHOTO
P1512
BP1512
CAPSTAN FG
LED GND
LOADING
SENSOR LED
DEW SENSOR
P1514
P1513
P1515
BP6501 TO OPERATION
GND
POWER SW
KEY SCAN
REG +5V
POWER LED +12V
SERIAL DATA
SERIAL CLOCK
MEMORY SW
CLEAR SW
SAFETY TAB SW
MODE SELECT SW
P1509
P1508
P1510
P1511
BP1508
SAFETY TAB
S1
S2
S3
REEL PULSE
PHOTO CP +B
BP7503 TO TIMER
TUNER
GND
REG +6V
POWER OUT
POWER ON
POWER SW
SERIAL DATA
SERIAL CLOCK
IC1501 ON2160
REEL SENSOR C.B VJB00A53
FRONT CONNECTION C.B VJB00A55
TO LUMINANCE & CHROMINANCE
TUNER
IC6002 BA6209
FRONT LOADING MOTOR DRIVE
WITH HEAT SINKER
DRIVE
IC6003 BA6209
LOADING MOTOR DRIVE
Q6001 2SD636
SENSOR LED DRIVE
QR6001 DTC124A
LOAD V UP
Q6002 2SD636
BUFF
Q6012 2SD636
RESET
TP6002 GND
TP6001
IC6001 MN15342VGC-3
VSS
CASSETTE OUT
CASSETTE IN
CASSETTE DOWN
CAMERA PAUSE
F. LOAD
F. UNLOAD
LOAD
UNLOAD
SYNC
KEY SCAN
SERIAL CLOCK
SERIAL DATA OUT
SERIAL DATA IN
RESET
VREF
H.SW FOR DETECTION OF CYLINDER LOOK
REEL PULSE
SUPPLY PHOTO
TAKEUP PHOTO
POWER ON
DEW
6H
INDEX
S1
S2
S3
SAFETY TAB
MEMORY SW
CLEAR SW
TIMER REC
VDD
OSC1
OSC2
FRAME ADV
CUE/REV
KEY SCAN 2
KEY SCAN 1
POWER ON
REC
AUDIO DUB
LOAD V UP
SENSOR LED
AUDIO MUTING
EE
SEARCH
D-UNLOAD 2
D-UNLOAD 1
SPEED FIX
CURRENT EMPHASIS
SERIAL CLOCK
DELAYED AUDIO REC
DELAYED REC
TV
CAPSTAN X8
CAPSTAN X4
CAPSTAN REVERSE
CAPSTAN ON
CAPSTAN X2
STILL
CYLINDER ON
TIMER SET
X6001 VSX0082
3.57MHz
DEW SENSOR
KEY SCAN
UN REG 14V
DEW
SENSOR LED
REG +12V
CAMERA PAUSE
HEAD SW
INDEX
POWER ON
SERIAL CLOCK
MOTOR GND
REG +6V
SAFETY TAB
POWER OUT
S3
REEL PULSE
S1
MEMORY SW
S2
CLEAR SW
QR6005 DTA124A
Q6003 2SB819
SAFETY TAB SW ON: ON
D6005 MA165
D6043

M CONTROL SCHEMATIC DIAGRAM


IC6001
MN15342VGC-3
IC6002
BA6209
IC6003 BA6209
IC6004
AN6914
Q6001
2SD636
Q6002
2SD636
Q6012
2SD636
Q6003
2SB819
Q6005
2SA719
Q6006
2SB641
Q6007
2SA719
Q6008
2SB641
Q6009
2SA719
QR6001
DTC124A
QR6002
DTC114A
QR6003
DTC114A
QR6004
DTC114A
QR6005
DTA124A
QR6006
DTA124A
QR6008
DTA124A
QR6012
DTC144A
QR6013
DTC144A
X6001
VSX0082
3.57MHz
FRONT LOADING MOTOR DRIVE
WITH HEAT SINKER
LOADING MOTOR DRIVE
DRIVE
BP1507
P1507
F.LOADING
CASSETTE IN
GND
CASSETTE OUT
CASSETTE DOWN
SUPPLY PHOTO
TAKE UP PHOTO
CASSETTE IN SW
CASSETTE OUT SW
CASSETTE DOWN SW
FRONT LOADING MOTOR CONNECTION C.B. VJB00A82
BP1512
P1512
CAPSTAN FG
LED GND
LOADING
SENSOR LED
DEW SENSOR
LOADING MOTOR CONNECTION C.B. VJB00A54
BP6501 TO OPERATION
POWER SW
KEY SCAN
REG +5V
POWER LED +12V
SERIAL DATA
SERIAL CLOCK
MEMORY SW
CLEAR SW
BP1508
SAFETY TAB
S1
S2
S3
REEL PULSE
PHOTO CP +8
BP7503 TO TIMER
TUNER
GND
REG +6V
POWER OUT
POWER ON
POWER SW
SERIAL DATA
SERIAL CLOCK
FRONT CONNECTION C.B. VJB00A55
TP6001
TP6002 GND
DEW SENSOR
KEY SCAN
UN REG 14V
DEW
SENSOR LED
REG +12V
CAMERA PAUSE
VSS
P00 CASSETTE OUT
P01 CASSETTE IN
P02 CASSETTE DOWN
P03 CAMERA PAUSE
P10 F.LOAD
P11 F.UNLOAD
P12 LOAD
P13 UNLOAD
SYNC
SIRQ
IRQ KEY SCAN
SBT SERIAL CLOCK
SBO SERIAL DATA OUT
SBI SERIAL DATA IN
RST RESET
VREF
P80 H.SW (FOR DETECTION OF CYLINDER LOCK)
P81 REEL PULSE
P82 SUPPLY PHOTO
P83 TAKEUP PHOTO
PAA POWER ON
PAB DEW
PBA 6H
PBB INDEX
P20 S1
P21 S2
P22 S3
P23 SAFETY TAB
P30 MEMORY SW
P31 CLEAR SW
P32 TIMER REC
VDD
OSC1
OSC2
FRAME ADV PF3
CUE/REV PF2
KEY SCAN 2 PF1
KEY SCAN 1 PF0
POWER ON PE3
REC PE2
AUDIO DUB PE1
LOAD V UP PE0
SENSOR LED P73
AUDIO MUTING P72
EE P71
SEARCH P70
D-UNLOAD 2 P63
D-UNLOAD 1 P62
SPEED FIX P61
CURRENT EMPHASIS P60
SERIAL CLOCK P93
DELAYED AUDIO REC P92
DELAYED REC P91
TV P90
CAPSTAN X8 P53
CAPSTAN X4 P52
CAPSTAN REVERSE P51
CAPSTAN ON P50
P43
CAPSTAN X2 P42
STILL P41
CYLINDER ON P40
TIMER SET P33
TO POWER
UNREG 14V
REG +12V
POWER OFF
REG +5V
MOTOR GND
REG +6V
GND
TO VIDEO
CAMERA PAUSE
TO AUDIO
P.B.
EE
AUDIO DUB
AUDIO MUTING
DELAYED AUDIO REC 12V
INDEX
DELAYED REC 12V
AV 12V
TO LUMINANCE & CHROMINANCE
STILL
EXCEPT REC 5V
REC
SEARCH
TO SERVO
DURING UNLOAD 2
FRAME ADV
CUE/REV
CAPSTAN X4
CAPSTAN ON
CAPSTAN X2
CAPSTAN REVERSE
CYLINDER ON
HEAD SW
BP3501 TO HEAD AMP
P.B. 5V
HSS
TO LUMINANCE & CHROMINANCE
POWER ON
TO AUDIO
AUDIO MUTE
MOTOR GND
REG +6V
SAFETY TAB
POWER OUT
SERIAL CLOCK
TO LUMINANCE & CHROMINANCE
TUNER
2
3
4
5
6
7
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9
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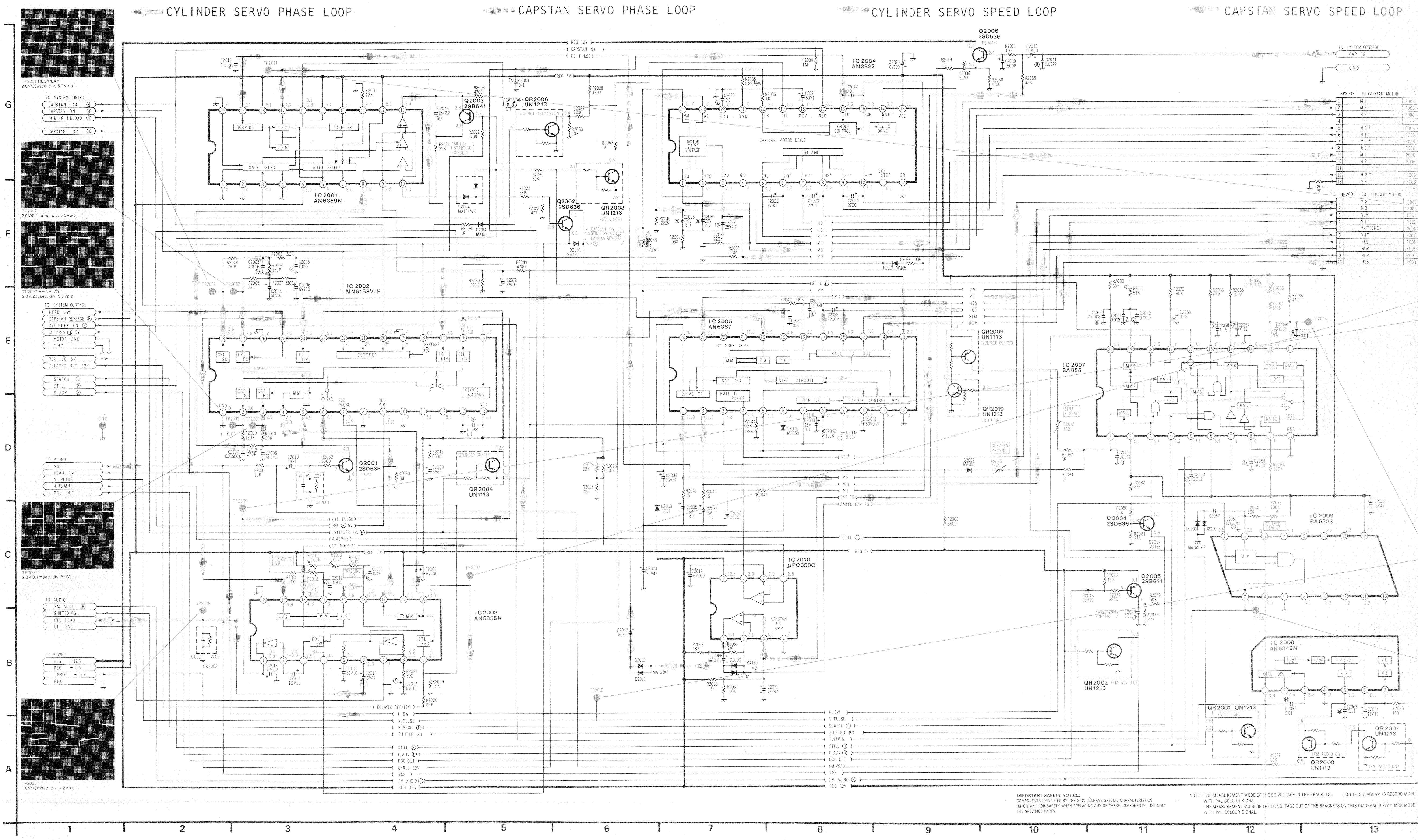
11
12
13

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

Next Page:
SERVO Section

3-10. SERVO SCHEMATIC DIAGRAM


CYLINDER SERVO PHASE LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CAPSTAN SERVO SPEED LOOP
TP2001 REC/PLAY
2.0V/20μsec. div. 5.0Vp-p
TO SYSTEM CONTROL
CAPSTAN X4 Ⓗ
CAPSTAN ON Ⓗ
DURING UNLOAD Ⓗ
CAPSTAN X2 Ⓗ
TP2002
2.0V/0.1msec. div. 5.0Vp-p
TP2003 REC/PLAY
2.0V/20μsec. div. 5.0Vp-p
TO SYSTEM CONTROL
HEAD SW
CAPSTAN REVERSE Ⓗ
CYLINDER ON Ⓗ
CUE/REV Ⓗ 5V
MOTOR GND
GND
REC Ⓗ 5V
DELAYED REC 12V
SEARCH Ⓛ
STILL Ⓗ
F. ADV Ⓗ
TP GND
TO VIDEO
VSS
HEAD SW
V PULSE
4.43 MHz
DOC OUT
TP2004
2.0V/0.1msec. div. 5.0Vp-p
TO AUDIO
FM AUDIO Ⓗ
SHIFTED PG
CTL HEAD
CTL GND
TO POWER
REG +12V
REG +5V
UNREG +12V
GND
TP2005
1.0V/10msec. div. 4.2Vp-p
IC2001 AN6359N
SCHMIDT
1/2
1/M
COUNTER
GAIN SELECT
AUTO SELECT
Q2003 2SB641
QR2006 UN1213
(DURING UNLOAD ON)
(MOTOR STARTING CIRCUIT)
Q2002 2SD636
QR2003 UN1213
D2004 MA154WK
D2001 MA165
D2003 MA165
(CAPSTAN ON or STILL MODE Ⓛ CAPSTAN REVERSE Ⓗ)
IC2004 AN3822
VM
PC1
GND
CS
TL
PCV
RCC
EC
ECR
VH+
VCC
MOTOR DRIVE VOLTAGE
TORQUE CONTROL
HALL IC DRIVE
CAPSTAN MOTOR DRIVE
1ST AMP
A3
ATC
A2
Q.B
H3−
H3+
H2−
H2+
H1−
H1+
ED/STOP
ER
Q2006 2SD636
TO SYSTEM CONTROL
CAP FG
GND
BP2003 TO CAPSTAN MOTOR
1 M2 P006
2 M3 P006
3 H3− P006
4
5 H3+ P006
6 H1− P006
7 VH+ P006
8 H1+ P006
9 M1 P006
10 H2− P006
11
12 H2+ P006
13 VH− P006
R2041 180
BP2001 TO CYLINDER MOTOR
1 M2 P001
2 M3 P001
3 V.M P001
4 M1 P001
5 VH−(GND) P001
6 VH+ P001
7 HES P001
8 HEM P001
9 HEM P001
10 HES P001
IC2002 MN6168VIF
CYL SC
CYL PC
FG DIV
DECODER
REVERSE
CTL DIV
CAP SC
CAP PC
MM
REC PAUSE
REC P.B
CLOCK 4.43MHz
VCC
Q2001 2SD636
QR2004 UN1113
(CYLINDER ON)
IC2005 AN6387
CYLINDER DRIVE
MM
FG
PG
HALL IC OUT
SAT DET
DIFF CIRCUIT
DRIVE TR
HALL IC POWER
LOCK DET
TORQUE CONTROL AMP
QR2009 UN1113
(VOLTAGE CONTROL)
QR2010 UN1213
(STILL ON)
IC2007 BA855
MM1
MM2
MM3
MM4
MM5
MM6
MM7
MM8
MM9
MM10
DFF
RESET
(STILL V-SYNC)
(CUE/REV V-SYNC)
D2007 MA165
Q2004 2SD636
IC2009 BA6323
MM
D2009
D2010
MA165×2
TRACKING VR
IC2003 AN6356N
1/3
MM
FF
TR MM
POL SW
CTL REC
IC2010 μPC358C
CAPSTAN FG AMP
D2011
D2012
MA165×2
D2005 MA165
D2006 MA165×2
Q2005 2SB641
(WAVEFORM SHAPER)
QR2002 UN1213
(FM AUDIO ON)
IC2008 AN6342N
1/2?
1/2
1/2771
XTAL OSC
E.F
V.E
K.Z
QR2001 UN1213
QR2007 UN1213
QR2008 UN1113
(FM AUDIO ON)
R2057 10K
REG 12V
CAPSTAN X4
FG PULSE
REG 5V
STILL Ⓗ
VM
M1
HES
HEM
H2−
H3+
H1−
H1+
M3
M2
VH+
CAP FG
AMPED CAP FG
CTL PULSE
REC Ⓗ 5V
CYLINDER ON Ⓗ
4.43MHz
CYLINDER PG
STILL Ⓛ
DELAYED REC+12V
H.SW
V.PULSE
SEARCH Ⓛ
SHIFTED PG
STILL Ⓗ
F.ADV Ⓗ
DOC OUT
UNREG 12V
VSS
FM AUDIO Ⓗ
TP2001
TP2002
TP2003
TP2004
TP2005
TP2006
TP2007
TP2008
TP2009
TP2010
TP2011
TP2013
TP2014
G
F
E
D
C
B
A
1
2
3
4
5
6
7
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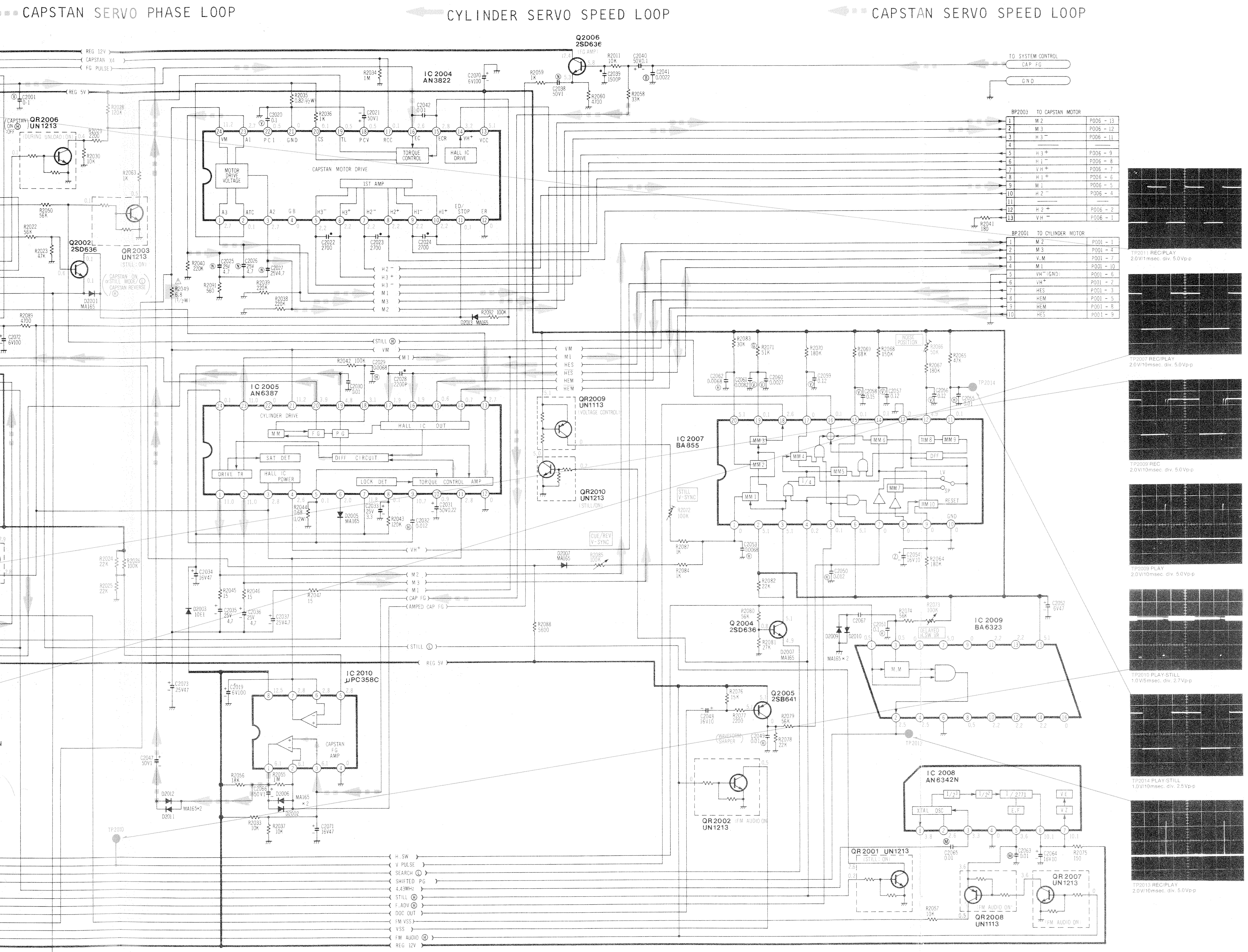
11
12
13

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS
IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY
THE SPECIFIED PARTS.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.


CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CAPSTAN SERVO SPEED LOOP
IC 2004 AN3822
CAPSTAN MOTOR DRIVE
TORQUE CONTROL
HALL IC DRIVE
MOTOR DRIVE VOLTAGE
1ST AMP
Q2006 2SD636
QR2006 UN1213
Q2002 2SD636
QR2003 UN1213
TO SYSTEM CONTROL
CAP FG
GND
BP2003 TO CAPSTAN MOTOR
BP2001 TO CYLINDER MOTOR
IC 2005 AN6387
CYLINDER DRIVE
HALL IC OUT
SAT DET
DIFF CIRCUIT
DRIVE TR
HALL IC POWER
LOCK DET
TORQUE CONTROL AMP
QR2009 UN1113
QR2010 UN1213
IC 2007 BA855
IC 2009 BA6323
Q2004 2SD636
Q2005 2SB641
IC 2010 μPC358C
CAPSTAN FG AMP
QR2002 UN1213
IC 2008 AN6342N
XTAL OSC
QR2001 UN1213
QR2007 UN1213
QR2008 UN1113
TP2011 REC/PLAY 2.0V/1msec. div. 5.0Vp-p
TP2007 REC/PLAY 2.0V/10msec. div. 5.0Vp-p
TP2009 REC 2.0V/10msec. div. 5.0Vp-p
TP2009 PLAY 2.0V/10msec. div. 5.0Vp-p
TP2010 PLAY/STILL 1.0V/5msec. div. 2.7Vp-p
TP2014 PLAY/STILL 1.0V/10msec. div. 2.5Vp-p
TP2013 REC/PLAY 2.0V/10msec. div. 5.0Vp-p
5
6
7
8
9
10
11
12
13

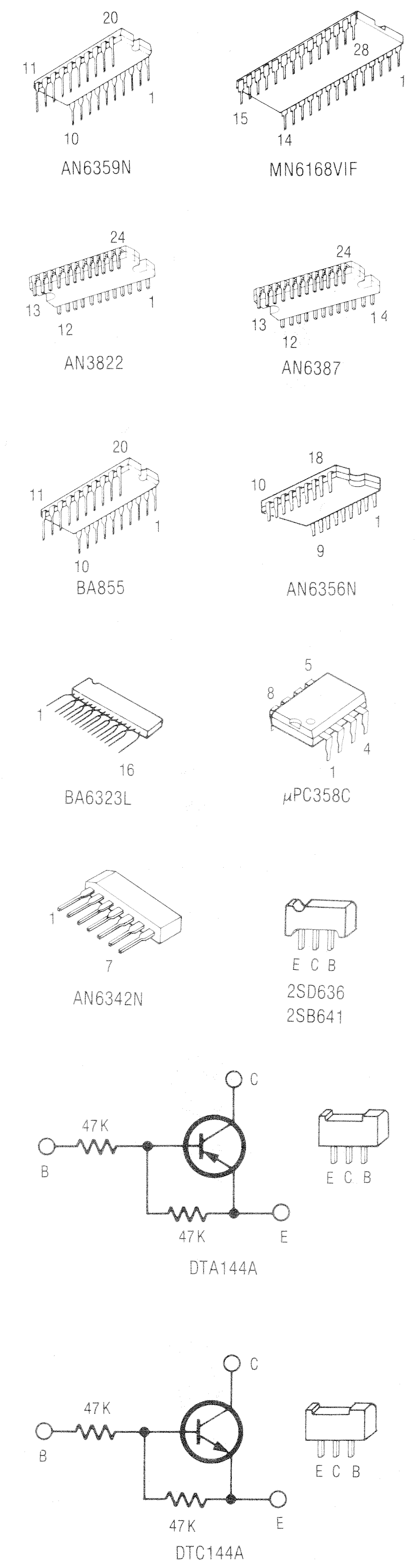
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (　) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.

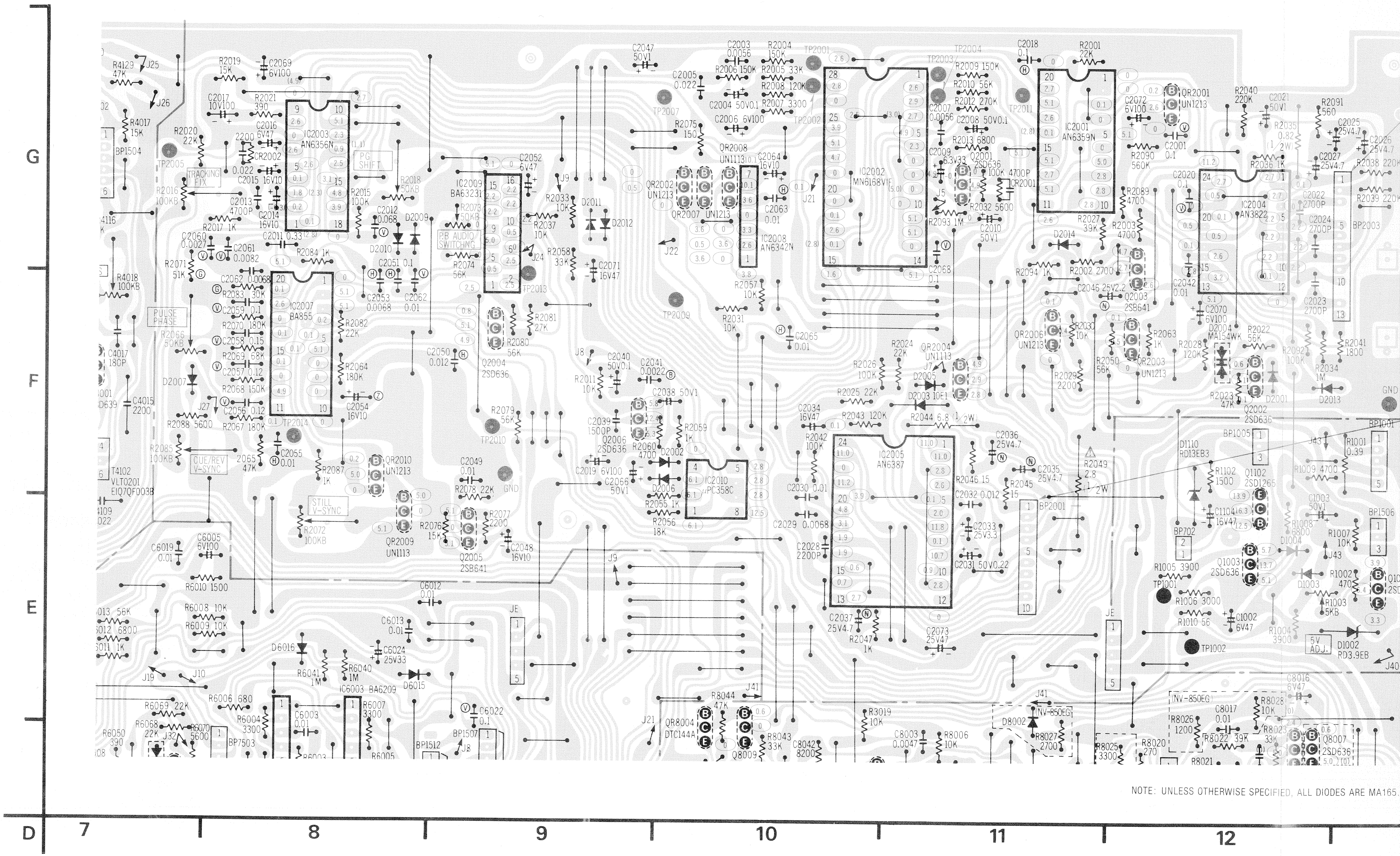
SERVO SCHEMATIC	
Transistor	
Q2001	D-4
Q2002	F-6
Q2003	G-5
Q2004	C-11
Q2005	C-11
Q2006	G-10
Transistor & Resistor	
QR2001	A-12
QR2002	B-11
QR2003	F-6
QR2004	D-5
QR2006	G-6
QR2007	B-13
QR2008	B-13
QR2009	E-9
QR2010	D-9
Integrated Circuit	
IC2001	G-3
IC2002	E-3
IC2003	B-3
IC2004	G-8
IC2005	E-8
IC2007	E-11
IC2008	B-13
IC2009	C-12
IC2010	C-7
Test Point	
TP2001	F-2
TP2002	F-3
TP2003	D-3
TP2004	D-3
TP2005	B-2
TP2007	C-5
TP2009	C-3
TP2010	B-10
TP2011	G-3
TP2013	C-12
TP2014	E-13
TP GND	D-1
Adjustment	
R2015	C-3
R2016	C-3
R2018	C-3
R2066	E-12
R2072	D-10
R2073	C-12
R2085	D-10
Connector	
BP2001	F-13
BP2003	G-13

ADDRESS INFORMATION

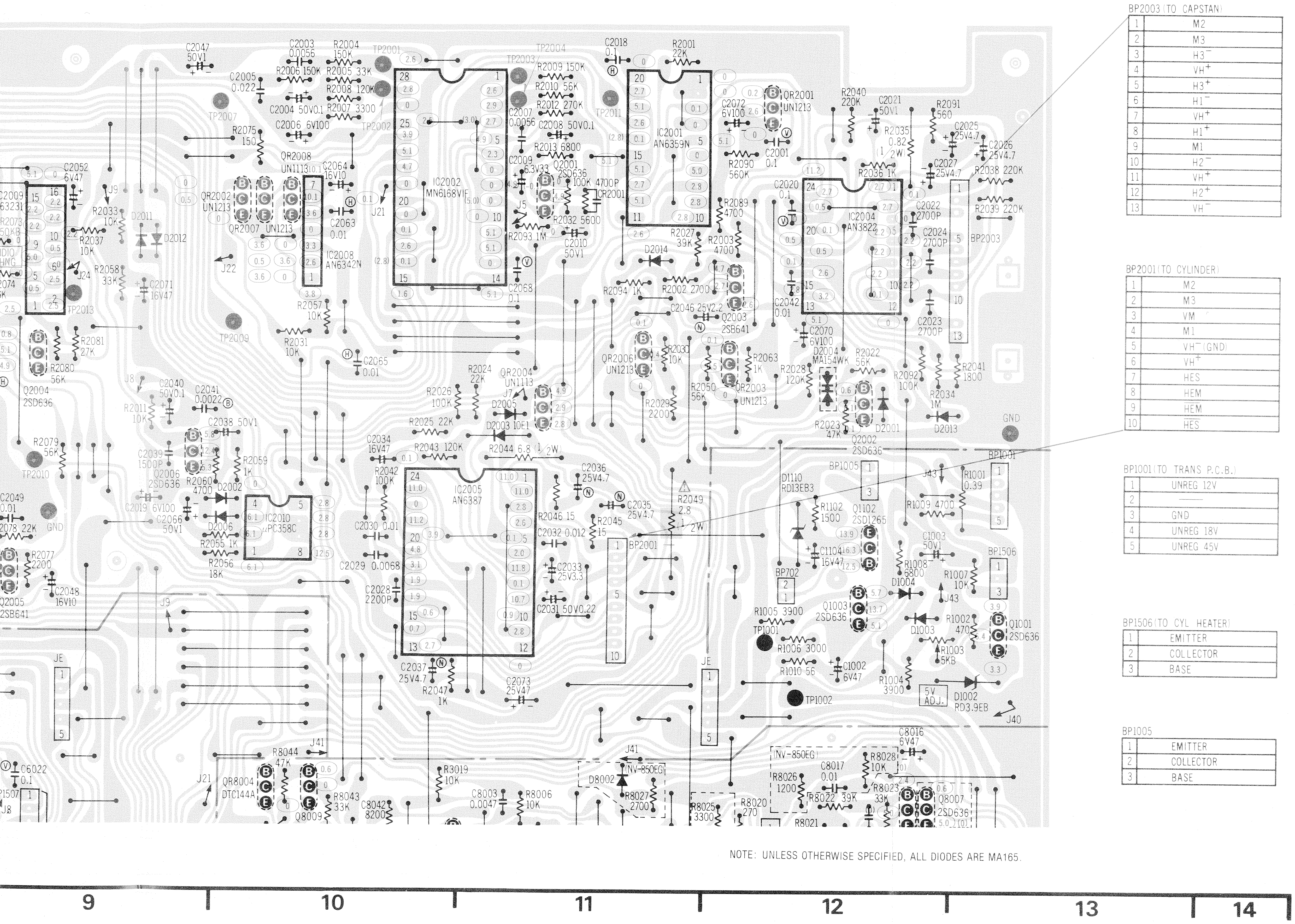
ICs & TRANSISTORs INFORMATION


20
11
1
10
AN6359N
28
1
15
14
MN6168VIF
24
13
1
12
AN3822
24
13
14
12
AN6387
20
11
1
10
BA855
18
10
1
9
AN6356N
1
16
BA6323L
5
8
4
1
μPC358C
1
7
AN6342N
E C B
2SD636
2SB641
C
47K
B
E C B
47K
E
DTA144A
C
47K
B
E C B
47K
E
DTC144A

3-11. SERVO Section In Main Circuit Board
(VEP03197A: NV-850EG/VEP03197B: NV-850B/VEP03197C: NV-850E)


G
F
E
D
7
8
9
10
11
12
IC2003 AN6356N
IC2007 BA855
IC2009 BA63231
IC2002 MN6168VIF
IC2001 AN6359N
IC2004 AN3822
IC2005 AN6387
IC2010 μPC358C
IC2008 AN6342N
IC6003 BA6209
TRACKING FIX
PG SHIFT
PB AUDIO SWITCHING
PULSE PHASE
CUE/REV V-SYNC
STILL V-SYNC
5V ADJ.

NOTE: UNLESS OTHERWISE SPECIFIED, ALL DIODES ARE MA165.


IC2001
AN6359N
IC2002
MN6168VIF
IC2004
AN3822
IC2005
AN6387
IC2008
AN6342N
IC2010
μPC358C
Q2001
2SD636
Q2002
2SD636
Q2003
2SB641
Q2004
2SD636
Q2005
2SB641
Q2006
2SD636
QR2001
UN1213
QR2002
UN1213
QR2003
UN1213
QR2004
UN1113
QR2006
UN1213
QR2007
UN1213
QR2008
UN1113
Q1001
2SD636
Q1002
2SD1265
Q1003
2SD636
QR8004
DTC144A
Q8007
2SD636
Q8009
D1002
RD3.9EB
D1110
RD13EB3
D2004
MA154WK
D2005
10E1
D2003
10E1
D8002
(NV-850EG)
BP2001
BP2003
BP1001
BP1005
BP1506
BP702
TP1001
TP1002
TP2001
TP2002
TP2003
TP2004
TP2007
TP2009
TP2010
TP2011
TP2013
GND
5V ADJ.
J40
J41
J43
JE
9
10
11
12
13
14

BP2003 (TO CAPSTAN)

1	M2
2	M3
3	H3^{-}
4	VH^{+}
5	H3^{+}
6	H1^{-}
7	VH^{+}
8	H1^{+}
9	M1
10	H2^{-}
11	VH^{+}
12	H2^{+}
13	VH^{-}

BP2001 (TO CYLINDER)

1	M2
2	M3
3	VM
4	M1
5	VH^{-} (GND)
6	VH^{+}
7	HES
8	HEM
9	$\overline{\text{HEM}}$
10	$\overline{\text{HES}}$

BP1001 (TO TRANS P.C.B.)

1	UNREG 12V
2	——
3	GND
4	UNREG 18V
5	UNREG 45V

BP1506 (TO CYL HEATER)

1	EMITTER
2	COLLECTOR
3	BASE

BP1005

1	EMITTER
2	COLLECTOR
3	BASE

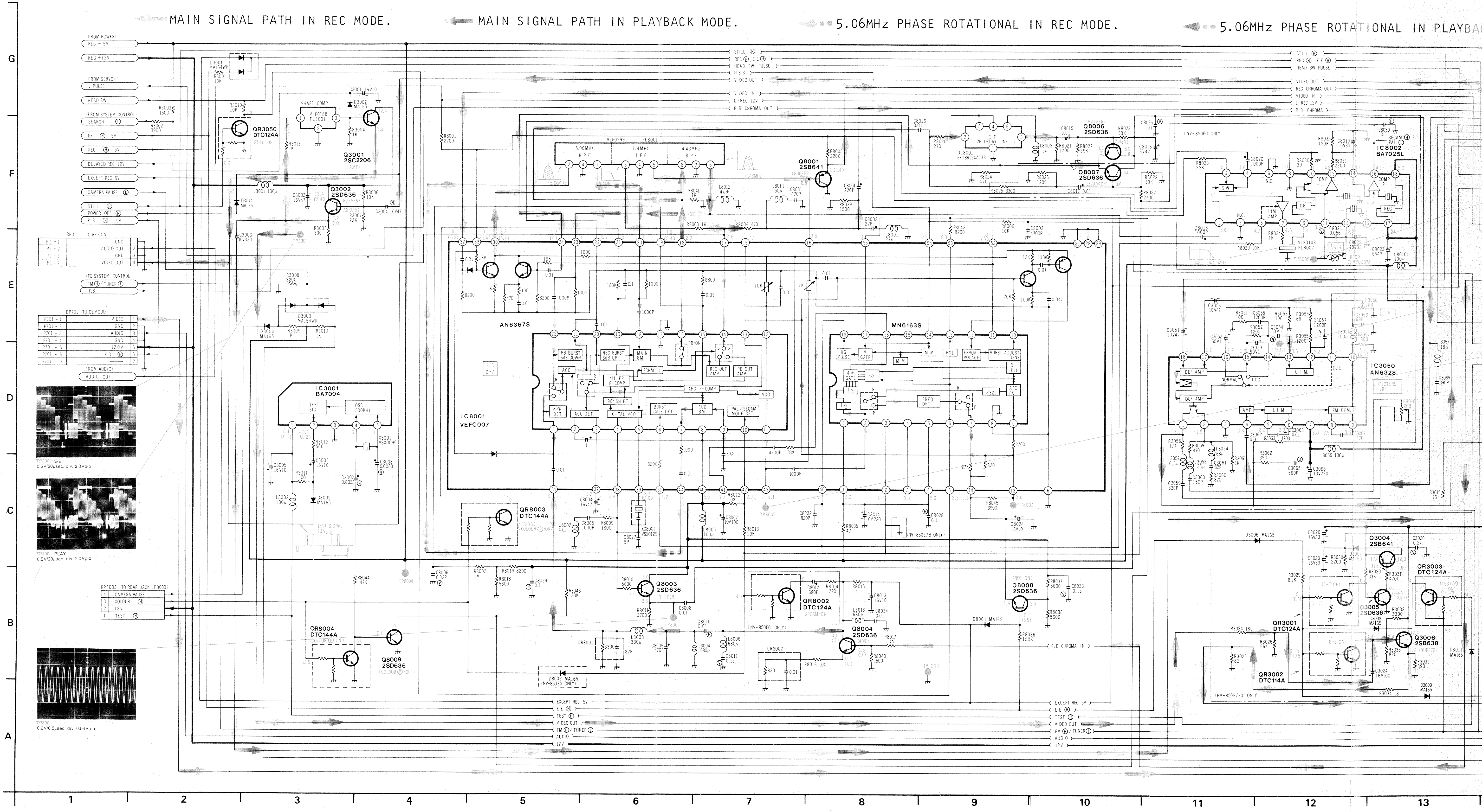
NOTE: UNLESS OTHERWISE SPECIFIED, ALL DIODES ARE MA165.

SERVO CIRCUIT BOARD	
Transistor	
Q2001	G-11
Q2002	F-12
Q2003	F-12
Q2004	F-9
Q2005	E-9
Q2006	F-9
Transistor & Resistor	
QR2001	G-12
QR2002	G-10
QR2003	F-12
QR2004	F-11
QR2006	F-11
QR2007	G-10
QR2008	G-10
QR2009	E-8
QR2010	F-8
Integrated Circuit	
IC2001	G-11
IC2002	G-10
IC2003	G-8
IC2004	G-12
IC2005	F-11
IC2007	F-8
IC2008	G-10
IC2009	G-9
IC2010	F-10
Test Point	
TP2001	G-10
TP2002	G-10
TP2003	G-11
TP2004	G-11
TP2005	G-7
TP2007	G-10
TP2009	F-10
TP2010	F-9
TP2011	G-11
TP2013	F-9
TP2014	F-8
TP GND	F-9
Adjustment	
R2015	D-5
R2016	G-7
R2018	G-8
R2066	F-7
R2072	E-8
R2073	G-9
R2085	F-7

ADDRESS INFORMATION

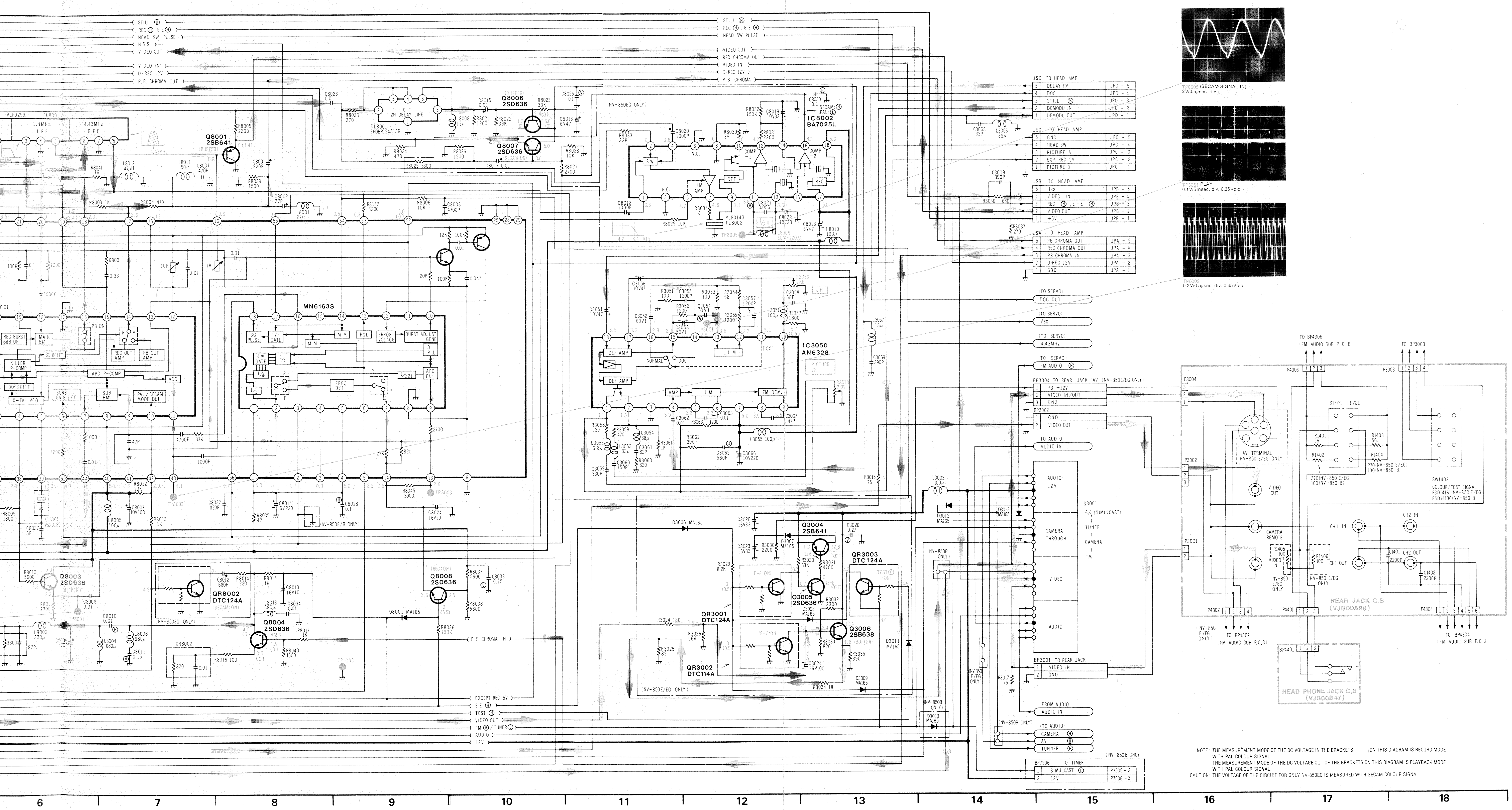
Next Page:
LUMINANCE (1) & CHROMINANCE Section

3-12. LUMINANCE (1) & CHROMINANCE SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MODE.
MAIN SIGNAL PATH IN PLAYBACK MODE.
5.06MHz PHASE ROTATIONAL IN REC MODE.
5.06MHz PHASE ROTATIONAL IN PLAYBA
(FROM POWER)
REG + 5V
REG +12V
(FROM SERVO)
V PULSE
HEAD SW
(FROM SYSTEM CONTROL)
SEARCH
EE 5V
REC 5V
DELAYED REC 12V
EXCEPT REC 5V
CAMERA PAUSE
STILL
POWER OFF
P.B 5V
BP1 TO RF CON.
BP701 TO DEMOD.
(FROM AUDIO)
AUDIO OUT
BP3003 TO REAR JACK (P3003)
CAMERA PAUSE
COLOUR
12V
TEST
TP3001 E-E
0.5V/20μsec. div. 2.0Vp-p
TP3001 PLAY
0.5V/20μsec. div. 2.0Vp-p
TP8001
0.2V/0.5μsec. div. 0.56Vp-p
QR3050 DTC124A
Q3001 2SC2206
Q3002 2SD636
IC3001 BA7004
IC8001 VEFC007
AN6367S
MN6163S
Q8001 2SB641
Q8006 2SD636
Q8007 2SD636
IC8002 BA7025L
IC3050 AN6328
QR8003 DTC144A
Q8003 2SD636
QR8002 DTC124A
Q8004 2SD636
Q8008 2SD636
QR8004 DTC144A
Q8009 2SD636
Q3004 2SB641
QR3003 DTC124A
Q3005 2SD636
Q3006 2SB638
QR3001 DTC124A
QR3002 DTC114A
VLF0299 FL8001
5.06MHz BPF
1.4MHz LPF
4.43MHz BPF
2H DELAY LINE
DL8001 EFDBR124A13B
TEST SIGNAL
P.B CHROMA IN
(NV-850EG ONLY)
(NV-850E/EG ONLY)
G F E D C B A
1 2 3 4 5 6 7 8 9 10 11 12 13

AM

IN PLAYBACK MODE. 5.06MHz PHASE ROTATIONAL IN REC MODE. 5.06MHz PHASE ROTATIONAL IN PLAYBACK MODE.



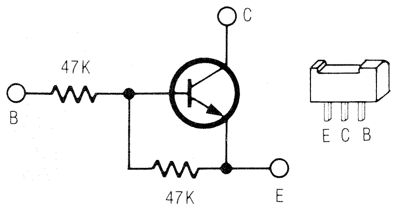
MN6163S
IC8002
BA7025L
IC3050
AN6328
Q8001
2SB641
Q8006
2SD636
Q8007
2SD636
Q8003
2SD636
QR8002
DTC124A
Q8004
2SD636
Q8008
2SD636
Q3004
2SB641
QR3003
DTC124A
Q3005
2SD636
Q3006
2SB638
QR3001
DTC124A
QR3002
DTC114A
2H DELAY LINE
DL8001
EFD8R124A13B
JSD TO HEAD AMP
JSC TO HEAD AMP
JSB TO HEAD AMP
JSA TO HEAD AMP
TO SERVO
DOC OUT
VSS
4.43MHz
FM AUDIO
BP3004 TO REAR JACK (AV) (NV-850E/EG ONLY)
BP3002
TO AUDIO
AUDIO IN
S3001
A/S (SIMULCAST)
TUNER
CAMERA
FM
CAMERA THROUGH
VIDEO
AUDIO
BP3001 TO REAR JACK
FROM AUDIO
TO AUDIO
BP7506 TO TIMER
SIMULCAST
12V
TP8002 (SECAM SIGNAL IN)
2V/0.5μsec. div.
TP3051 PLAY
0.1V/5msec. div. 0.35Vp-p
0.2V/0.5μsec. div. 0.65Vp-p
REAR JACK C.B
(VJB00A98)
HEAD PHONE JACK C.B
(VJB00B47)
AV TERMINAL
VIDEO OUT
CH1 IN
CH2 IN
CH1 OUT
CH2 OUT
CAMERA REMOTE
S1401 LEVEL
SW1402
COLOUR/TEST SIGNAL
TO BP4306 (FM AUDIO SUB P.C.B)
TO BP3003
TO BP4302 (FM AUDIO SUB P.C.B)
TO BP4304 (FM AUDIO SUB P.C.B)
EXCEPT REC 5V
E E
TEST
VIDEO OUT
FM / TUNER
AUDIO
12V
P.B CHROMA IN
6
7
8
9
10
11
12
13
14
15
16
17
18

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.
CAUTION: THE VOLTAGE OF THE CIRCUIT FOR ONLY NV-850EG IS MEASURED WITH SECAM COLOUR SIGNAL.

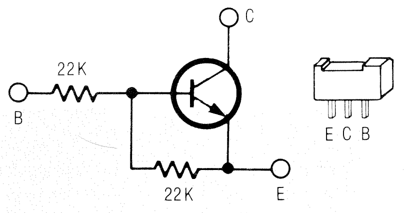
LUMINANCE, CHROMINANCE SCHEMATIC	
Transistor	
Q3001	G-4
Q3002	F-3
Q3004	B-13
Q3005	B-13
Q3006	B-13
Q8001	F-8
Q8003	B-6
Q8004	B-8
Q8006	F-10
Q8007	F-10
Q8008	B-9
Q8009	B-4
Transistor & Resistor	
QR3001	B-12
QR3002	B-12
QR3003	B-13
QR3050	F-3
QR8002	B-7
QR8003	C-5
QR8004	B-3
Integrated Circuit	
IC3001	D-3
IC3050	D-12
IC8001	D-5
IC8002	F-12
Test Point	
TP3001	E-3
TP3051	E-12
TP8001	B-6
TP8002	C-7
TP8003	C-9
TP8004	B-4
TP8005	E-12
TP GND	B-9
Adjustment	
R3018	D-13
R3056	E-12
L8009	E-12
Connector	
BP1	E-1
BP701	E-1
BP3001	B-15
BP3002	D-15
BP3003	B-2
BP3004	D-15
BP7506	A-15
JSA	E-15
JSB	F-15
JSC	F-15
JSD	F-15

ADDRESS INFORMATION

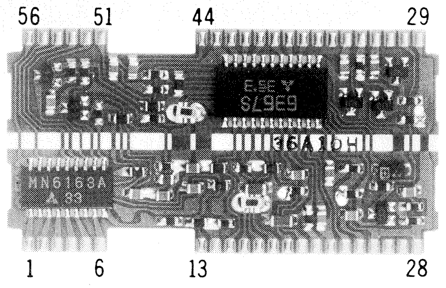
ICs & TRANSISTORs INFORMATION


C
47K
B
47K
E
E C B

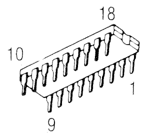
DTC144A


C
22K
B
22K
E
E C B

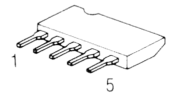
DTC124A


56
51
44
29
MN6163A
1
6
13
28

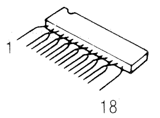
VEFC007



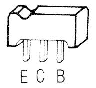
AN6328



BA7004



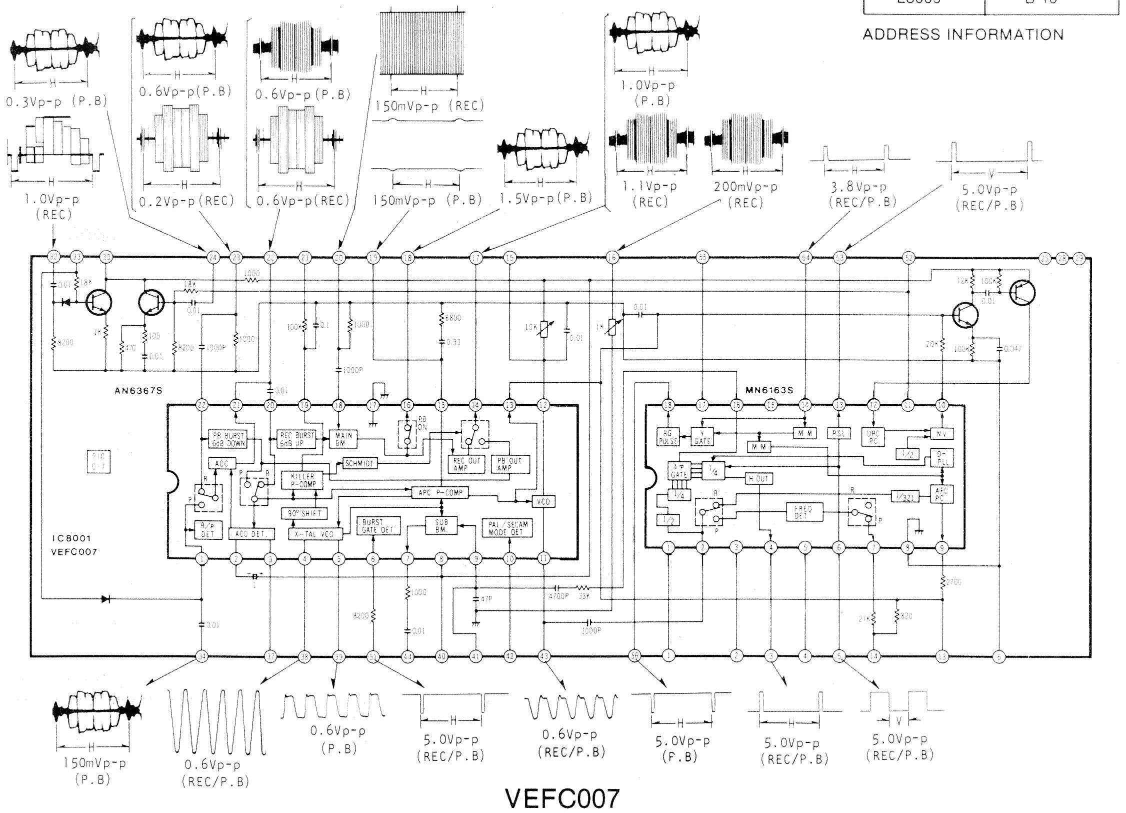
BA7025L



2SC2206
2SD636
2SB641
2SD638

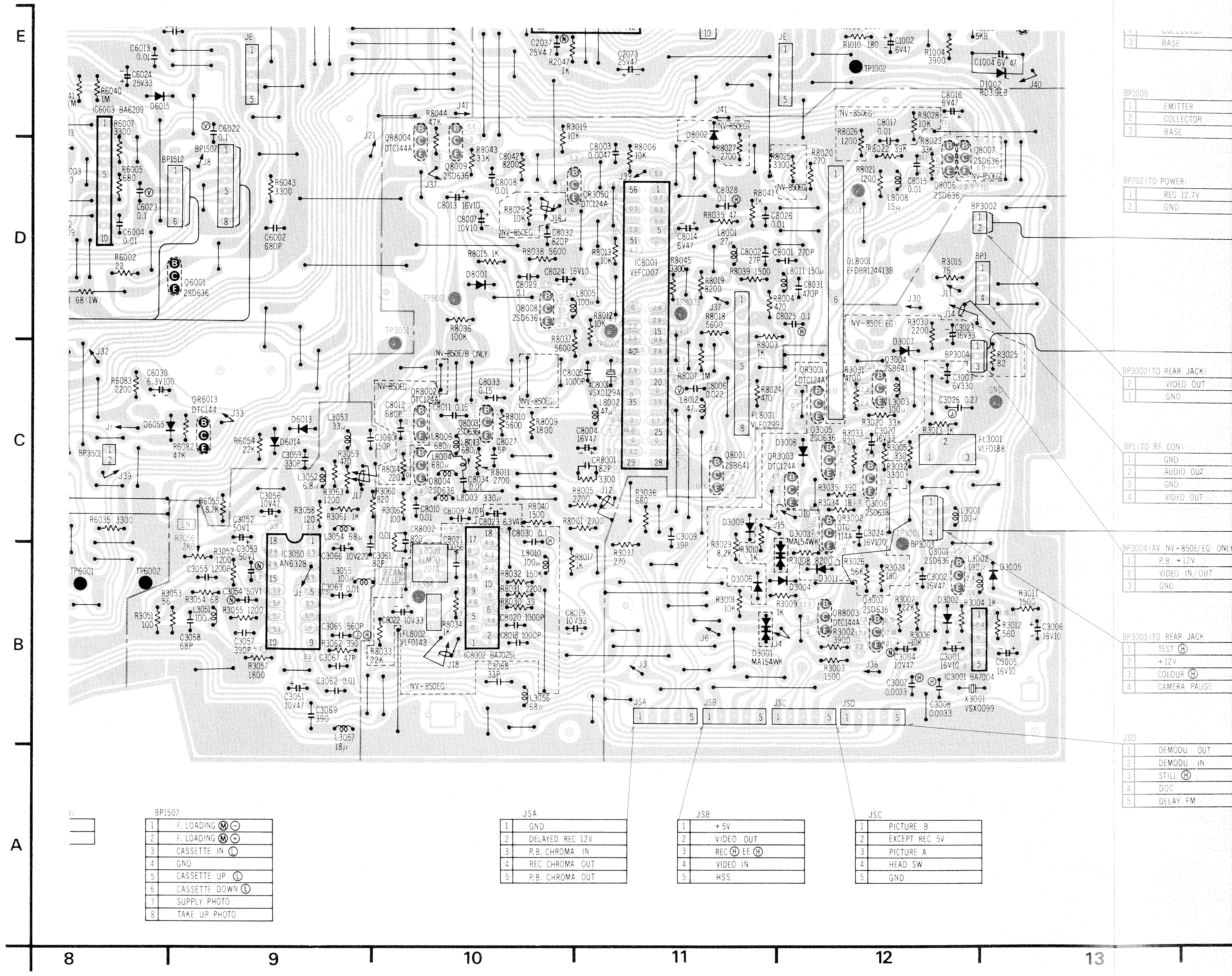
LUMINANCE & CHROMINANCE CIRCUIT BOARD	
Transistor	
Q3001	B-12
Q3002	B-12
Q3004	C-12
Q3005	C-12
Q3006	C-12
Q8001	C-11
Q8003	C-10
Q8004	C-10
Q8006	D-12
Q8007	D-12
Q8008	D-10
Q8009	D-10
Transistor & Resistor	
QR3001	C-12
QR3002	C-12
QR3003	C-12
QR3050	D-11
QR8002	C-10
QR8003	B-12
QR8004	D-10
Integrated Circuit	
IC3001	B-13
IC3050	B-9
IC8001	D-11
IC8002	B-10
Test Point	
TP3001	B-12
TP3051	C-10
TP8001	D-10
TP8002	D-11
TP8003	D-11
TP8004	D-12
TP8005	B-10
TP GND	C-13
Adjustment	
R3018	D-5
R3056	B-9
L8009	B-10

ADDRESS INFORMATION


0.3Vp-p (P.B)
0.6Vp-p(P.B)
0.6Vp-p (P.B)
150mVp-p (REC)
1.0Vp-p (P.B)
1.0Vp-p (REC)
0.2Vp-p(REC)
0.6Vp-p(REC)
150mVp-p (P.B)
1.5Vp-p(P.B)
1.1Vp-p (REC)
200mVp-p (REC)
3.8Vp-p (REC/P.B)
5.0Vp-p (REC/P.B)
AN6367S
MN6163S
IC8001 VEFC007
150mVp-p (P.B)
0.6Vp-p (REC/P.B)
0.6Vp-p (P.B)
5.0Vp-p (REC/P.B)
0.6Vp-p (REC/P.B)
5.0Vp-p (P.B)
5.0Vp-p (REC/P.B)
5.0Vp-p (REC/P.B)

VEFC007

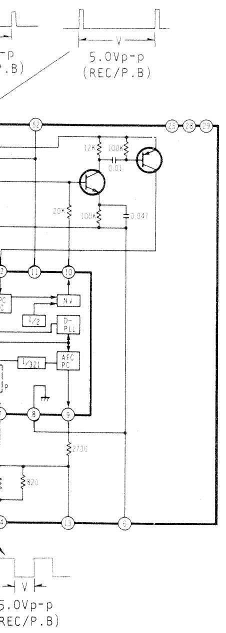
3-13. LUMINANCE (1) & CHROMINANCE Section In Main Circuit Board (VEP03197A: NV-850EG/VEP03197B: NV-850B/VEP03197C: NV-850E)


E
D
C
B
A
8
9
10
11
12
13
IC8001 VEFC007
IC3050 AN6328
IC8002 BA7025L
IC3001 BA7004
BP1507
1 F. LOADING Ⓜ⊖
2 F. LOADING Ⓜ⊕
3 CASSETTE IN Ⓛ
4 GND
5 CASSETTE UP Ⓛ
6 CASSETTE DOWN Ⓛ
7 SUPPLY PHOTO
8 TAKE UP PHOTO
JSA
1 GND
2 DELAYED REC 12V
3 P.B. CHROMA IN
4 REC CHROMA OUT
5 P.B. CHROMA OUT
JSB
1 +5V
2 VIDEO OUT
3 REC Ⓗ EE Ⓗ
4 VIDEO IN
5 HSS
JSC
1 PICTURE B
2 EXCEPT REC 5V
3 PICTURE A
4 HEAD SW
5 GND
3 BASE
BP1005
1 EMITTER
2 COLLECTOR
3 BASE
BP702 (TO POWER)
1 REG 12.7V
2 GND
BP3002 (TO REAR JACK)
2 VIDEO OUT
1 GND
BP1 (TO RF CON)
1 GND
2 AUDIO OUT
3 GND
4 VIDEO OUT
BP3004 (AV NV-850E/EG ONL
1 P.B. +12V
2 VIDEO IN/OUT
3 GND
BP3003 (TO REAR JACK
1 TEST Ⓗ
2 +12V
3 COLOUR Ⓗ
4 CAMERA PAUSE
JSD
1 DEMODU OUT
2 DEMODU IN
3 STILL Ⓗ
4 DOC
5 DELAY FM

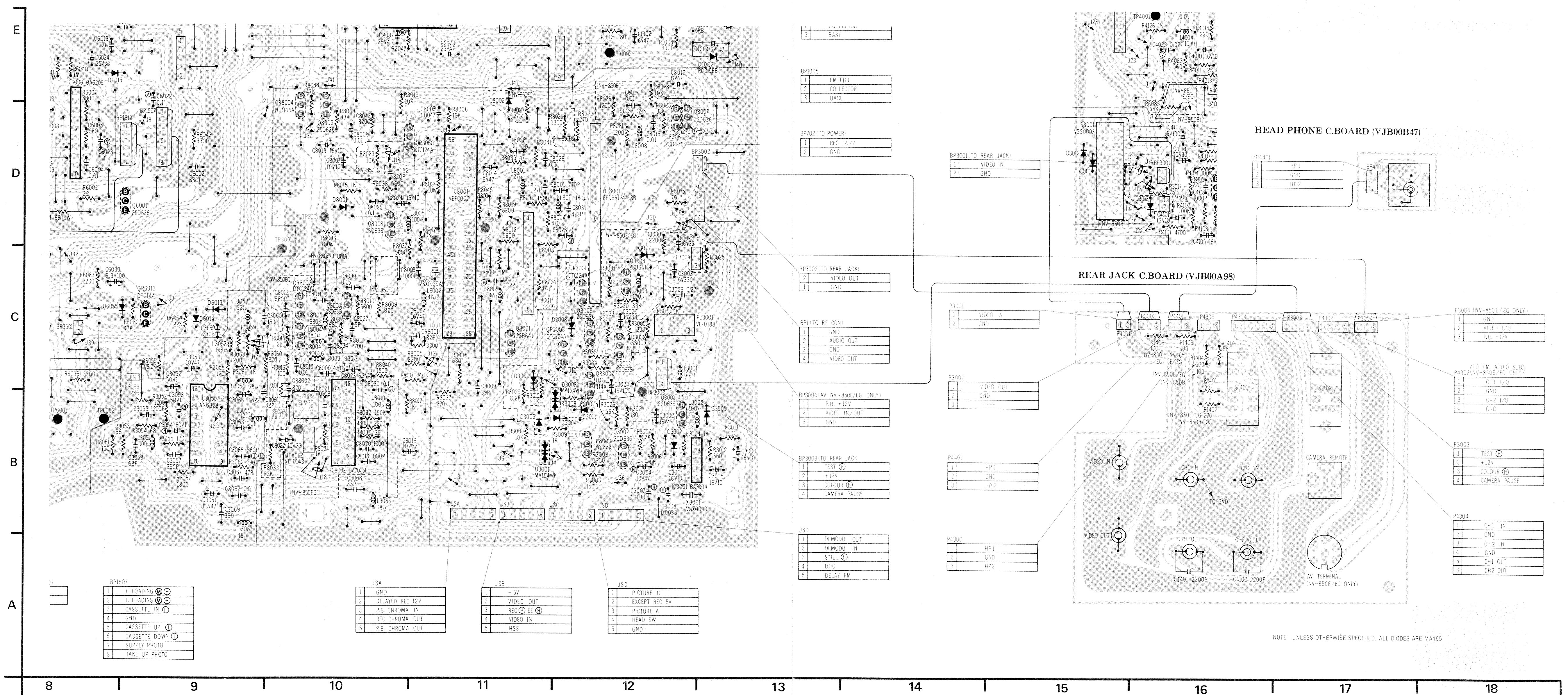
3-13. LUMINANCE (1) & CHROMINANCE Section In Main Circuit Board (VEP03197A: NV-850EG/VEP03197B: NV-850B/VEP03197C: NV-850E)

LUMINANCE & CHROMINANCE CIRCUIT BOARD	
Transistor	
Q3001	B-12
Q3002	B-12
Q3004	C-12
Q3005	C-12
Q3006	C-12
Q8001	C-11
Q8003	C-10
Q8004	C-10
Q8006	D-12
Q8007	D-12
Q8008	D-10
Q8009	D-10
Transistor & Resistor	
QR3001	C-12
QR3002	C-12
QR3003	C-12
QR3050	D-11
QR8002	C-10
QR8003	B-12
QR8004	D-10
Integrated Circuit	
IC3001	B-13
IC3050	B-9
IC8001	D-11
IC8002	B-10
Test Point	
TP3001	B-12
TP3051	C-10
TP8001	D-10
TP8002	D-11
TP8003	D-11
TP8004	D-12
TP8005	B-10
TP GND	C-13
Adjustment	
R3018	D-5
R3056	B-9
L8009	B-10

DDRESS INFORMATION



5.0Vp-p
(REC/P.B)
52
25
28
29
12K
100K
0.01
20K
100K
0.047
11
10
NV
1/2
D-PLL
1/321
AFC PC
8
9
2700
820
13
6
V
5.0Vp-p
(REC/P.B)



E
D
C
B
A
8
9
10
11
12
13
14
15
16
17
18
IC8001 VEF0007
IC3050 AN6328
IC3001 BA7004
IC8002 BA7025L
TP8001
TP8002
TP8003
TP8004
TP8005
TP3001
TP3051
TP6001
TP6002
TP1002
TP4001
JSA
JSB
JSC
JSD
BP1507
BP1
BP3002
BP3004
BP3003
HEAD PHONE C.BOARD (VJB00B47)
REAR JACK C.BOARD (VJB00A98)
S3001 VSS0093
D3012
D3010
P3001
P3002
P4401
P4306
P4304
P3003
P4302
P3004
VIDEO IN
VIDEO OUT
CH1 IN
CH2 IN
TO GND
CH1 OUT
CH2 OUT
C1401 2200P
C4102 2200P
CAMERA REMOTE
AV TERMINAL (NV-850E/EG ONLY)
S1401
S1402

3	BASE

BP1005

1	EMITTER
2	COLLECTOR
3	BASE

BP702 (TO POWER)

1	REG 12.7V
2	GND

BP3001 (TO REAR JACK)

1	VIDEO IN
2	GND

BP3002 (TO REAR JACK)

2	VIDEO OUT
1	GND

BP1 (TO RF CON)

1	GND
2	AUDIO OUT
3	GND
4	VIDEO OUT

BP3004 (AV NV-850E/EG ONLY)

1	P.B. +12V
2	VIDEO IN/OUT
3	GND

BP3003 (TO REAR JACK)

1	TEST Ⓗ
2	+12V
3	COLOUR Ⓗ
4	CAMERA PAUSE

JSD

1	DEMODU OUT
2	DEMODU IN
3	STILL Ⓗ
4	DOC
5	DELAY FM

P3001

1	VIDEO IN
2	GND

P3002

1	VIDEO OUT
2	GND
3	———

P4401

1	HP 1
2	GND
3	HP 2

P4306

1	HP1
2	GND
3	HP2

BP4401

1	HP 1
2	GND
3	HP 2

P3004 (NV-850E/EG ONLY)

1	GND
2	VIDEO I/O
3	P.B. +12V

P4302 (TO FM AUDIO SUB) (NV-850E/EG ONLY)

1	CH1 I/O
2	GND
3	CH2 I/O
4	GND

P3003

1	TEST Ⓗ
2	+12V
3	COLOUR Ⓗ
4	CAMERA PAUSE

P4304

1	CH1 IN
2	GND
3	CH 2 IN
4	GND
5	CH1 OUT
6	CH2 OUT

BP1507

1	F. LOADING Ⓜ⊖
2	F. LOADING Ⓜ⊕
3	CASSETTE IN Ⓛ
4	GND
5	CASSETTE UP Ⓛ
6	CASSETTE DOWN Ⓛ
7	SUPPLY PHOTO
8	TAKE UP PHOTO

JSA

1	GND
2	DELAYED REC 12V
3	P.B. CHROMA IN
4	REC CHROMA OUT
5	P.B. CHROMA OUT

JSB

1	+ 5V
2	VIDEO OUT
3	REC Ⓗ EE Ⓗ
4	VIDEO IN
5	HSS

JSC

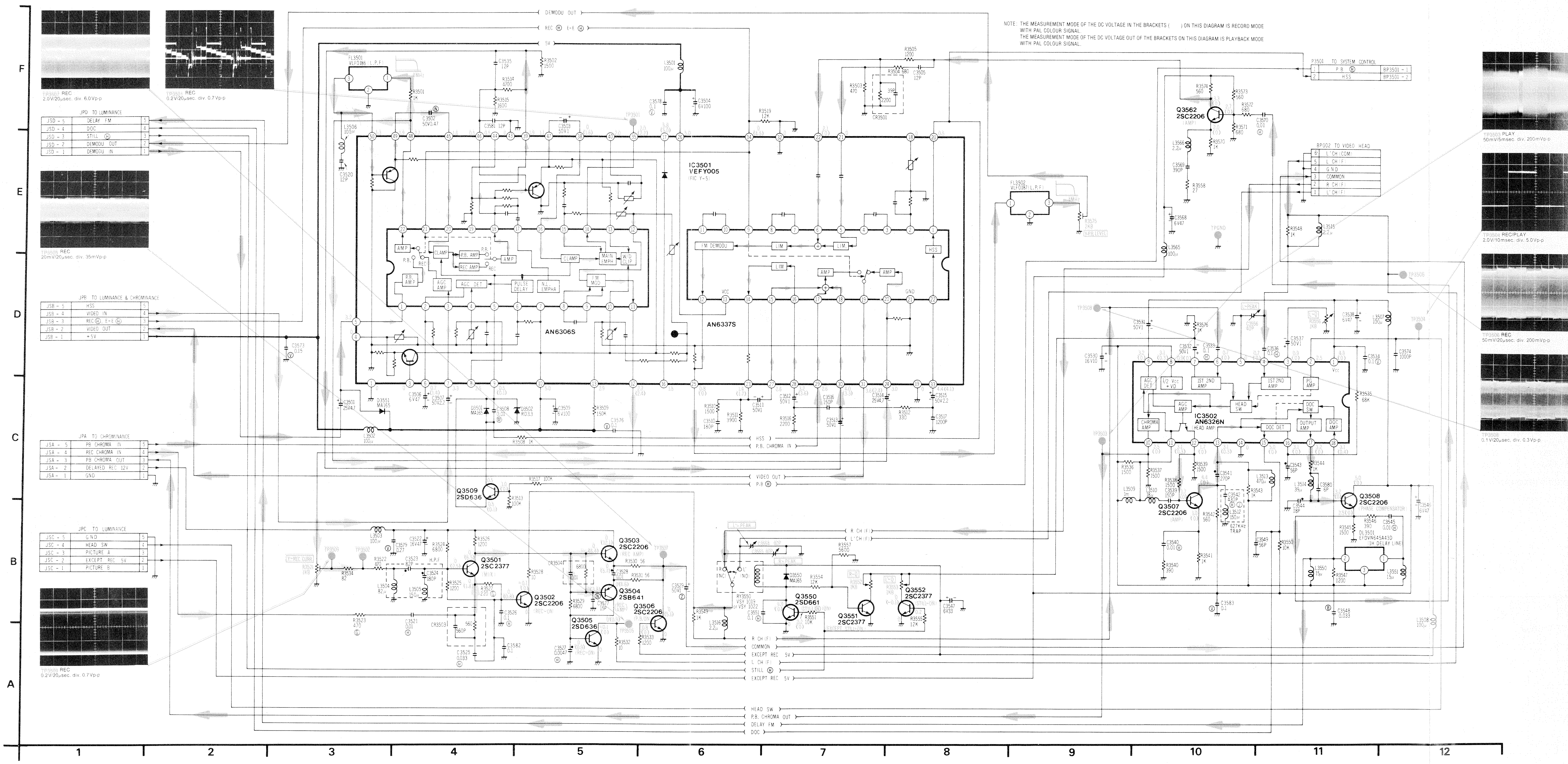
1	PICTURE B
2	EXCEPT REC 5V
3	PICTURE A
4	HEAD SW
5	GND

NOTE: UNLESS OTHERWISE SPECIFIED, ALL DIODES ARE MA165

Next Page:
HEAD AMP & LUMINANCE (2) Section

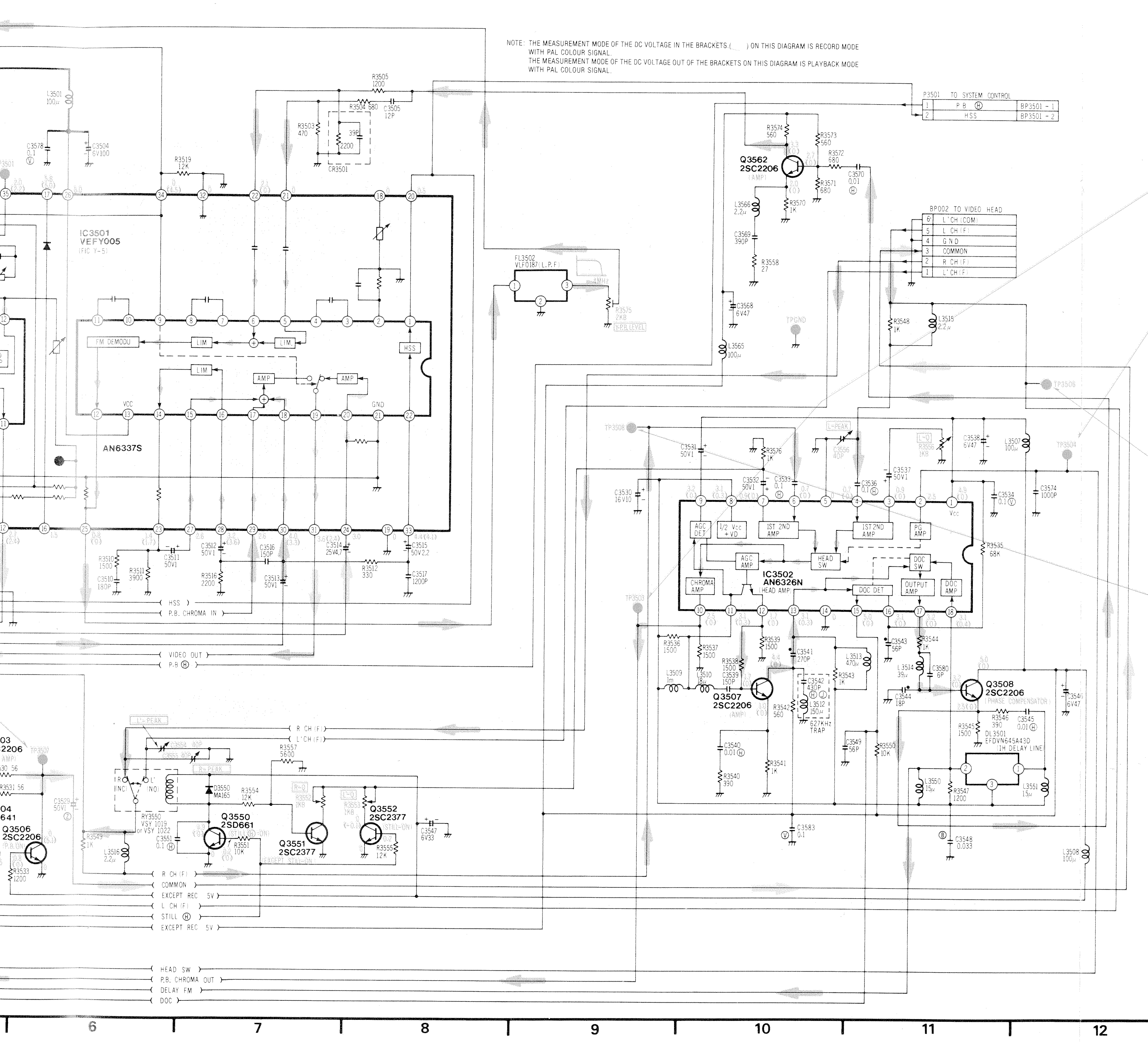
3-14. HEAD AMP & LUMINANCE (2) SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE.   MAIN SIGNAL PATH IN PLAYBACK MODE.

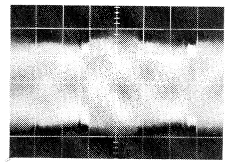

TP3507 REC
2.0V/20μsec. div. 6.0Vp-p
TP3501 REC
0.2V/20μsec. div. 0.7Vp-p
TP3505 REC
20mV/20μsec. div. 35mVp-p
TP3509 REC
0.2V/20μsec. div. 0.7Vp-p
TP3503 PLAY
50mV/5msec. div. 200mVp-p
TP3504 REC/PLAY
2.0V/10msec. div. 5.0Vp-p
TP3506 REC
50mV/20μsec. div. 200mVp-p
TP3508
0.1V/20μsec. div. 0.3Vp-p
JPD TO LUMINANCE
JSD - 5 DELAY FM 5
JSD - 4 DOC 4
JSD - 3 STILL Ⓗ 3
JSD - 2 DEMODU OUT 2
JSD - 1 DEMODU IN 1
JPB TO LUMINANCE & CHROMINANCE
JSB - 5 HSS 5
JSB - 4 VIDEO IN 4
JSB - 3 REC Ⓗ, E-E Ⓗ 3
JSB - 2 VIDEO OUT 2
JSB - 1 +5V 1
JPA TO CHROMINANCE
JSA - 5 PB CHROMA IN 5
JSA - 4 REC CHROMA IN 4
JSA - 3 PB CHROMA OUT 3
JSA - 2 DELAYED REC 12V 2
JSA - 1 GND 1
JPC TO LUMINANCE
JSC - 5 GND 5
JSC - 4 HEAD SW 4
JSC - 3 PICTURE A 3
JSC - 2 EXCEPT REC 5V 2
JSC - 1 PICTURE B 1
DEMODU OUT
REC Ⓗ E-E Ⓗ
5V
FL3501 VLF0186 (L.P.F)
IC3501 VEFY005 (FIC Y-5)
AN6306S
AN6337S
FL3502 VLF0187 (L.P.F)
P3501 TO SYSTEM CONTROL
P.B. Ⓗ BP3501-1
HSS BP3501-2
Q3562 2SC2206
BP002 TO VIDEO HEAD
L'CH(COM)
L CH(F)
GND
COMMON
R CH(F)
L'CH(F)
IC3502 AN6326N HEAD AMP
Q3507 2SC2206
Q3508 2SC2206
DL3501 EFDVN645A43D (1H DELAY LINE)
Q3509 2SD636
HSS
P.B. CHROMA IN
VIDEO OUT
P.B Ⓗ
Q3501 2SC2377
Q3502 2SC2206
Q3503 2SC2206
Q3504 2SB641
Q3505 2SD636
Q3506 2SC2206
Q3550 2SD661
Q3551 2SC2377
Q3552 2SC2377
R CH(F)
L'CH(F)
R CH(F)
COMMON
EXCEPT REC 5V
L CH(F)
STILL Ⓗ
EXCEPT REC 5V
HEAD SW
P.B. CHROMA OUT
DELAY FM
DOC
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.

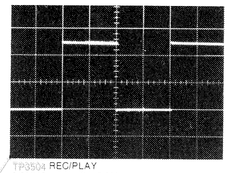
MAIN SIGNAL PATH IN PLAYBACK MODE.


IC3501
VEFY005
AN6337S
FM DEMODU
LIM
AMP
HSS
IC3502
AN6326N
HEAD AMP
AGC DET
1/2 Vcc + VD
1ST 2ND AMP
HEAD SW
DOC SW
DOC DET
OUTPUT AMP
DOC AMP
CHROMA AMP
AGC AMP
PB AMP
Q3562
2SC2206
Q3507
2SC2206
Q3508
2SC2206
Q3550
2SD661
Q3551
2SC2377
Q3552
2SC2377
Q3506
2SC2206
FL3502
VLF0187 (L.P.F)
P3501 TO SYSTEM CONTROL
P.B Ⓗ
HSS
BP3501-1
BP3501-2
BP002 TO VIDEO HEAD
L'CH (COM)
L CH (F)
GND
COMMON
R CH (F)
L'CH (F)
DL3501
EFDVN645A430
(1H DELAY LINE)
627KHz TRAP
HSS
P.B. CHROMA IN
VIDEO OUT
P.B Ⓗ
R CH (F)
L CH (F)
COMMON
EXCEPT REC 5V
STILL Ⓗ
EXCEPT REC 5V
HEAD SW
P.B. CHROMA OUT
DELAY FM
DOC
TP3503
TP3504
TP3506
TP3508
TP GND
6
7
8
9
10
11
12

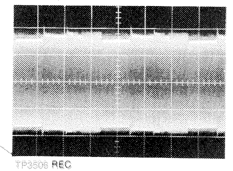
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.



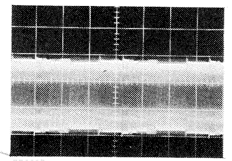
TP3503 PLAY
50mV/5msec. div. 200mVp-p



TP3504 REC/PLAY
2.0V/10msec. div. 5.0Vp-p



TP3506 REC
50mV/20μsec. div. 200mVp-p

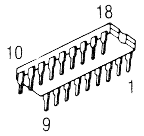


TP3508
0.1V/20μsec. div. 0.3Vp-p

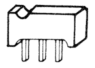
HEAD AMP SCHEMATIC	
Transistor	
Q3501	B-4
Q3502	B-5
Q3503	B-5
Q3504	B-5
Q3505	A-5
Q3506	B-6
Q3507	C-10
Q3508	C-11
Q3509	C-4
Q3550	B-7
Q3551	B-7
Q3552	B-8
Q3562	E-10
Integrated Circuit	
IC3501	E-6
IC3502	C-10
Test Point	
TP3501	F-5
TP3502	B-3
TP3503	C-9
TP3504	D-12
TP3505	B-5
TP3506	D-12
TP3507	B-6
TP3508	D-9
TP3509	B-3
TP GND	E-10
Adjustment	
R3521	B-3
R3552	B-7
R3553	B-8
R3556	D-11
R3575	E-9
C3554	B-7
C3555	B-7
C3556	D-11
Connector	
JPA	C-1
JPB	D-1
JPC	B-1
JPD	F-1
BP002	E-11
P3501	F-11

ADDRESS INFORMATION

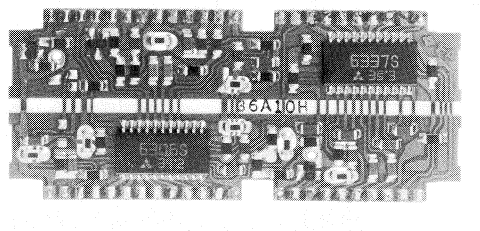
IC & TRANSISTORs INFORMATION



AN6326N



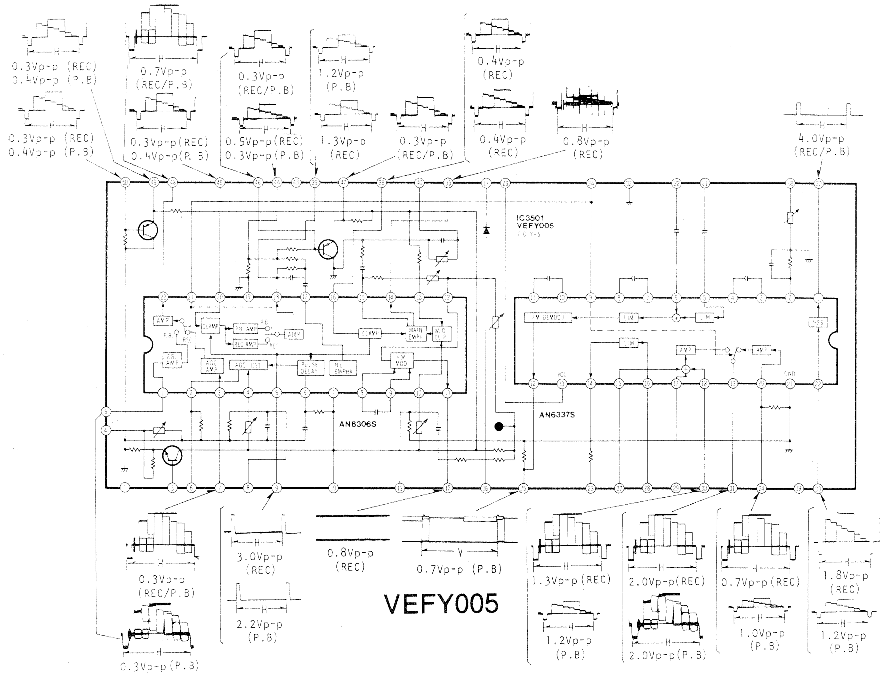
2SC2377
2SC2206
2SB641
2SD661



VEFY005

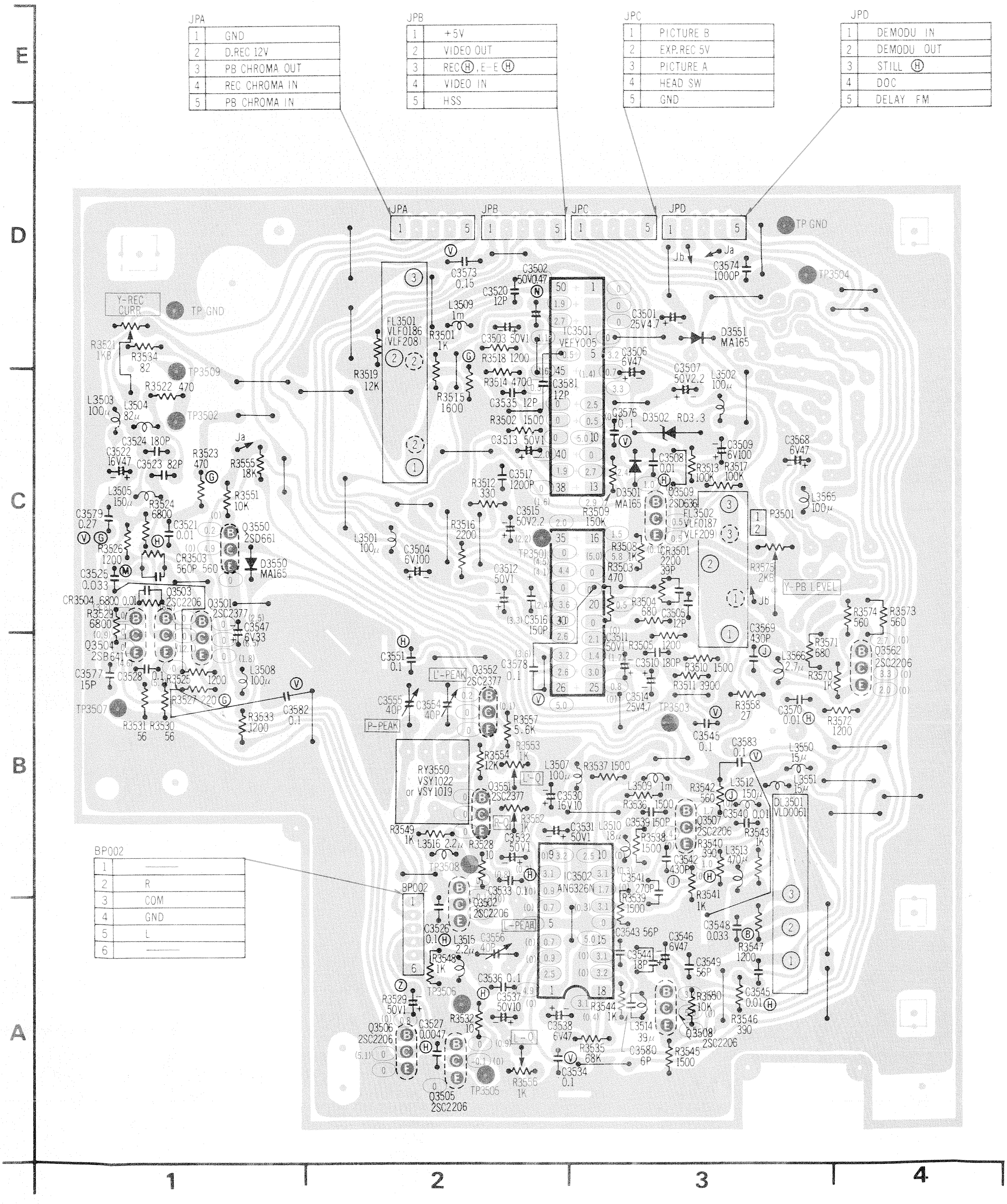
HEAD AMP CIRCUIT BOARD	
Transistor	
Q3501	B-1
Q3502	A-2
Q3503	B-1
Q3504	B-1
Q3505	A-2
Q3506	A-2
Q3507	B-3
Q3508	A-3
Q3509	C-3
Q3550	C-1
Q3551	B-2
Q3552	B-2
Q3562	B-4
Integrated Circuit	
IC3501	C-2
IC3502	A-3
Test Point	
TP3501	C-2
TP3502	C-1
TP3503	B-3
TP3504	D-3
TP3505	A-2
TP3506	A-2
TP3507	B-1
TP3508	B-2
TP3509	D-1
TP GND	D-1
TP GND	D-3
Adjustment	
R3521	D-1
R3552	B-2
R3553	B-2
R3556	A-2
R3575	C-3
C3554	B-2
C3555	B-2
C3556	A-2

ADDRESS INFORMATION


0.3Vp-p (REC)
0.4Vp-p (P.B)
0.7Vp-p (REC/P.B)
0.3Vp-p (REC/P.B)
1.2Vp-p (P.B)
0.4Vp-p (REC)
0.3Vp-p (REC)
0.4Vp-p (P.B)
0.3Vp-p (REC)
0.4Vp-p (P.B)
0.5Vp-p (REC)
0.3Vp-p (P.B)
1.3Vp-p (REC)
0.3Vp-p (REC/P.B)
0.4Vp-p (REC)
0.8Vp-p (REC)
4.0Vp-p (REC/P.B)
IC3501 VEFY005
AN6306S
AN6337S
0.3Vp-p (REC/P.B)
3.0Vp-p (REC)
2.2Vp-p (P.B)
0.8Vp-p (REC)
0.7Vp-p (P.B)
1.3Vp-p (REC)
2.0Vp-p (REC)
0.7Vp-p (REC)
1.8Vp-p (REC)
1.2Vp-p (P.B)
2.0Vp-p (P.B)
1.0Vp-p (P.B)
1.2Vp-p (P.B)
0.3Vp-p (P.B)

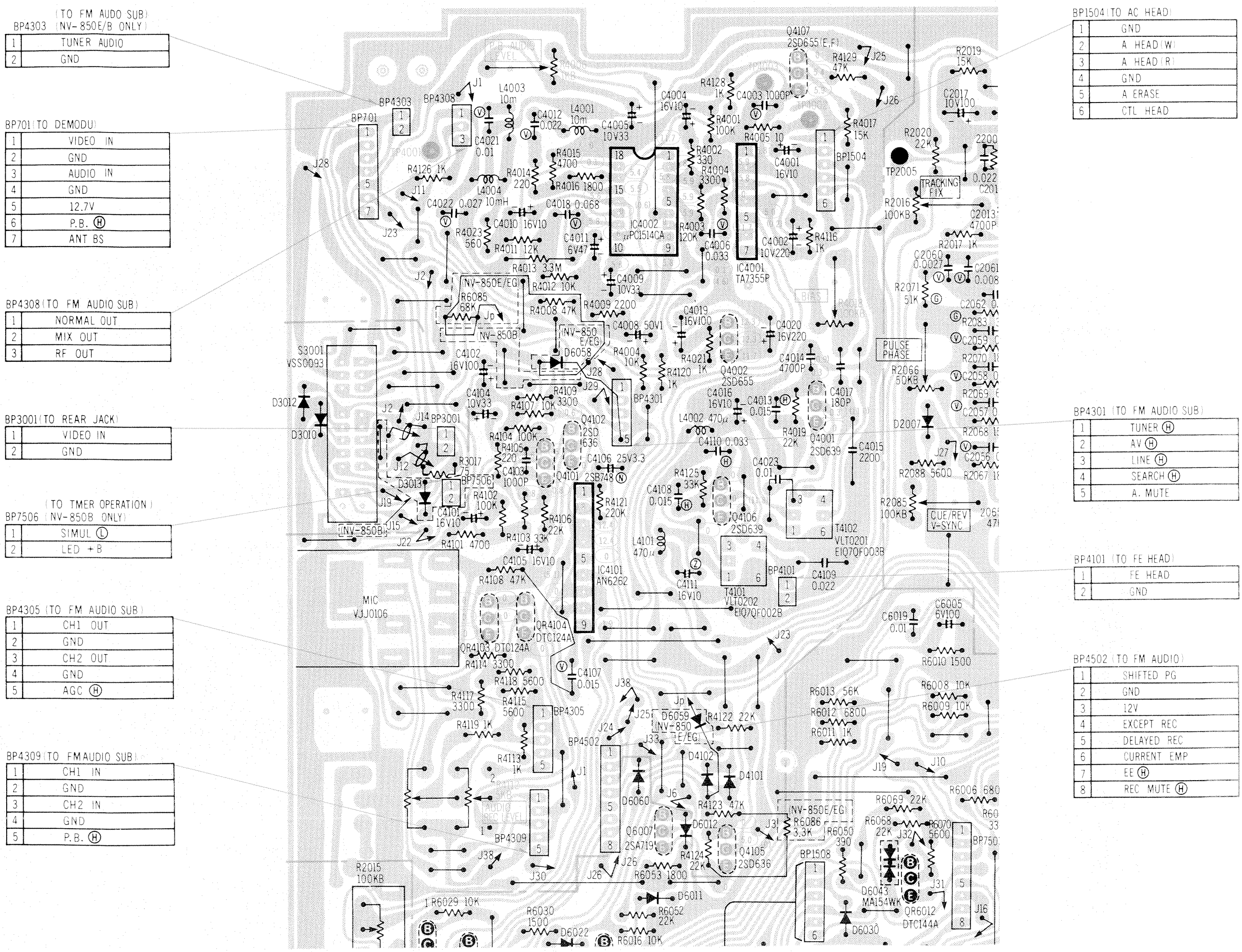
VEFY005

3-15. HEAD AMP & LUMINANCE (2) CIRCUIT BOARD (VEP05053A)



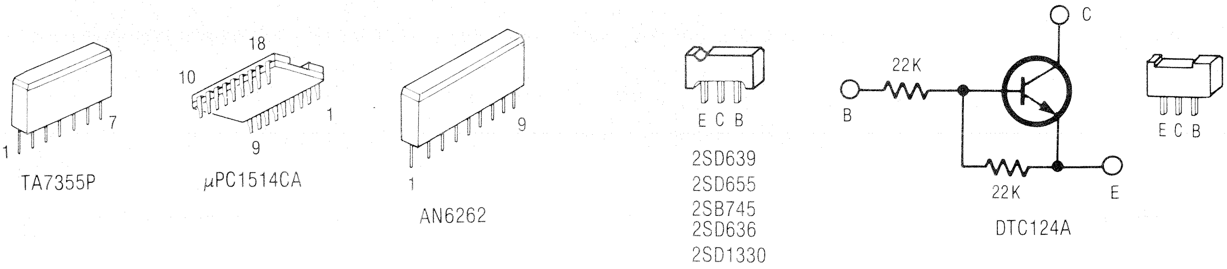
E
D
C
B
A
1
2
3
4
JPA
1 GND
2 D.REC 12V
3 PB CHROMA OUT
4 REC CHROMA IN
5 PB CHROMA IN
JPB
1 +5V
2 VIDEO OUT
3 REC Ⓗ, E-E Ⓗ
4 VIDEO IN
5 HSS
JPC
1 PICTURE B
2 EXP.REC 5V
3 PICTURE A
4 HEAD SW
5 GND
JPD
1 DEMODU IN
2 DEMODU OUT
3 STILL Ⓗ
4 DOC
5 DELAY FM
BP002
1 ——
2 R
3 COM
4 GND
5 L
6 ——
TP GND
TP3504
TP3509
TP3502
TP3501
TP3503
TP3507
TP3508
TP3506
TP3505
Y-REC CURR
Y-PB LEVEL
L'-PEAK
P-PEAK
L'-Q
R-Q
L-PEAK
L-Q
FL3501 VLF0186 (VLF208)
FL3502 VLF0187 (VLF209)
IC3501 VEFY005
IC3502 AN6326N
RY3550 VSY1022 or VSY1019
DL3501 VLD0061
Q3550 2SD661
Q3503 2SC2206
Q3501 2SC2377
Q3504 2SB641
Q3552 2SC2377
Q3551 2SC2377
Q3502 2SC2206
Q3506 2SC2206
Q3505 2SC2206
Q3507 2SC2206
Q3508 2SC2206
Q3509 2SD636
Q3562 2SC2206
D3551 MA165
D3502 RD3.3
D3501 MA165
D3550 MA165
CR3501 2200 39P
CR3503 560P 560
CR3504 6800 0.01
P3501

3-16. AUDIO Section In Main Circuit Board (VEP03197A: NV-850EG/VEP03197B: NV-850B/VEP03197C


BP4303 (TO FM AUDO SUB) (NV-850E/B ONLY)
1 TUNER AUDIO
2 GND
BP701 (TO DEMODU)
1 VIDEO IN
2 GND
3 AUDIO IN
4 GND
5 12.7V
6 P.B. Ⓗ
7 ANT BS
BP4308 (TO FM AUDIO SUB)
1 NORMAL OUT
2 MIX OUT
3 RF OUT
BP3001 (TO REAR JACK)
1 VIDEO IN
2 GND
BP7506 (TO TMER OPERATION) (NV-850B ONLY)
1 SIMUL Ⓛ
2 LED +B
BP4305 (TO FM AUDIO SUB)
1 CH1 OUT
2 GND
3 CH2 OUT
4 GND
5 AGC Ⓗ
BP4309 (TO FMAUDIO SUB)
1 CH1 IN
2 GND
3 CH2 IN
4 GND
5 P.B. Ⓗ
BP1504 (TO AC HEAD)
1 GND
2 A HEAD (W)
3 A HEAD (R)
4 GND
5 A ERASE
6 CTL HEAD
BP4301 (TO FM AUDIO SUB)
1 TUNER Ⓗ
2 AV Ⓗ
3 LINE Ⓗ
4 SEARCH Ⓗ
5 A. MUTE
BP4101 (TO FE HEAD)
1 FE HEAD
2 GND
BP4502 (TO FM AUDIO)
1 SHIFTED PG
2 GND
3 12V
4 EXCEPT REC
5 DELAYED REC
6 CURRENT EMP
7 EE Ⓗ
8 REC MUTE Ⓗ
IC4002 μPC1514CA
IC4001 TA7355P
IC4101 AN6262
S3001 VSS0093
MIC VJJ0106
TRACKING FIX
PULSE PHASE
CUE/REV V-SYNC
TP2005
T4101 VLT0202 EIQ7QF002B
T4102 VLT0201 EIQ7QF003B
Q4107 2SD655(E,F)
Q4002 2SD655
Q4001 2SD639
Q4106 2SD639
Q4101 2SB748
Q4102 2SD1636
QR4104 DTC124A
QR4105 DTC124A
Q6007 2SA719
Q4105 2SD636
D6043 MA154WK
QR6012 DTC144A
NV-850E/EG
NV-850B
R2015 100KB
R2016 100KB
R2066 50KB
R2085 100KB

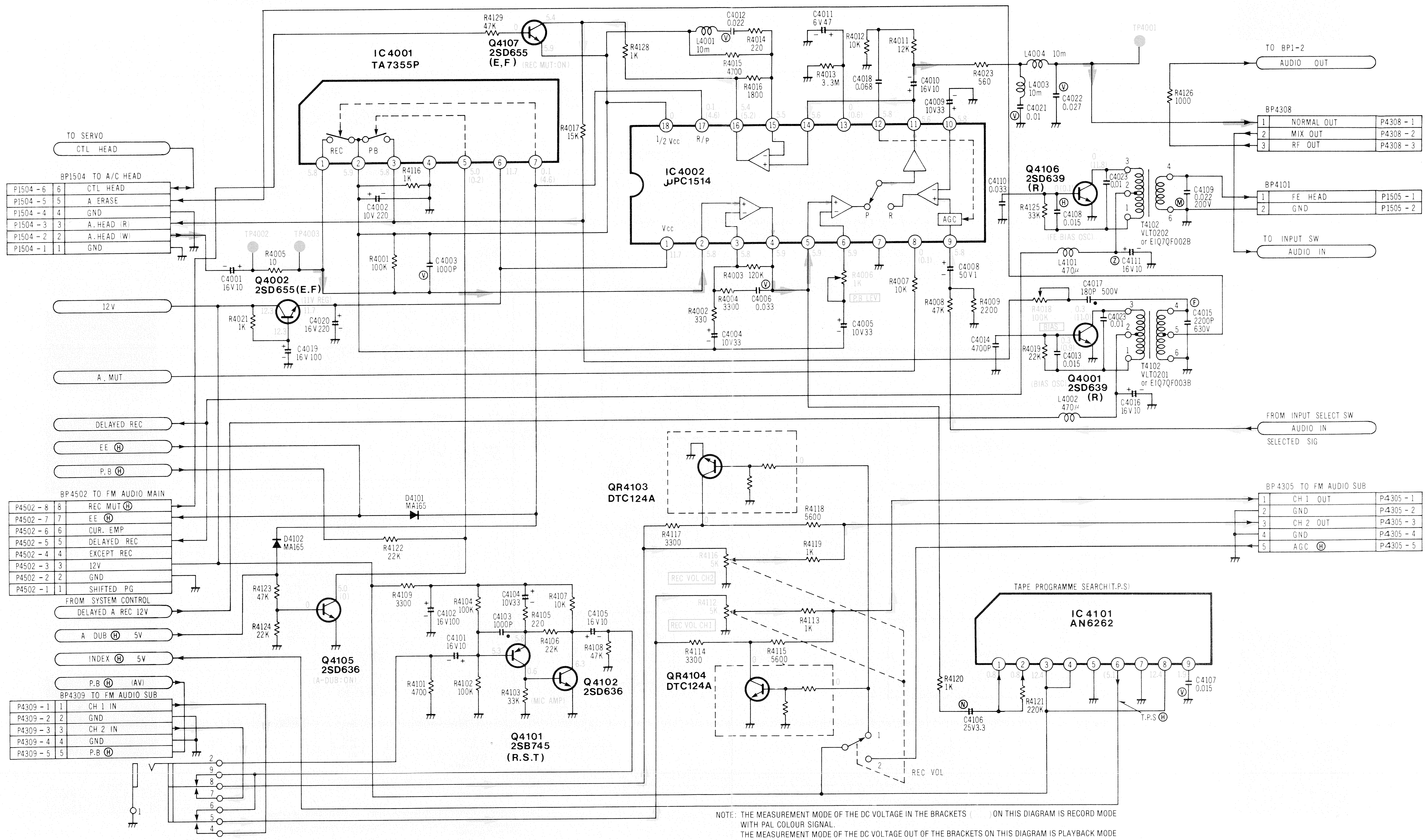
NOTE: UNLESS OTHERWISE SPECIFIED, ALL DIODES ARE MA165.

ICs & TRANSISTORs INFORMATION


7
1
TA7355P
18
10
1
9
μPC1514CA
9
1
AN6262
E C B
2SD639
2SD655
2SB745
2SD636
2SD1330
C
22K
B
22K
E
DTC124A
E C B

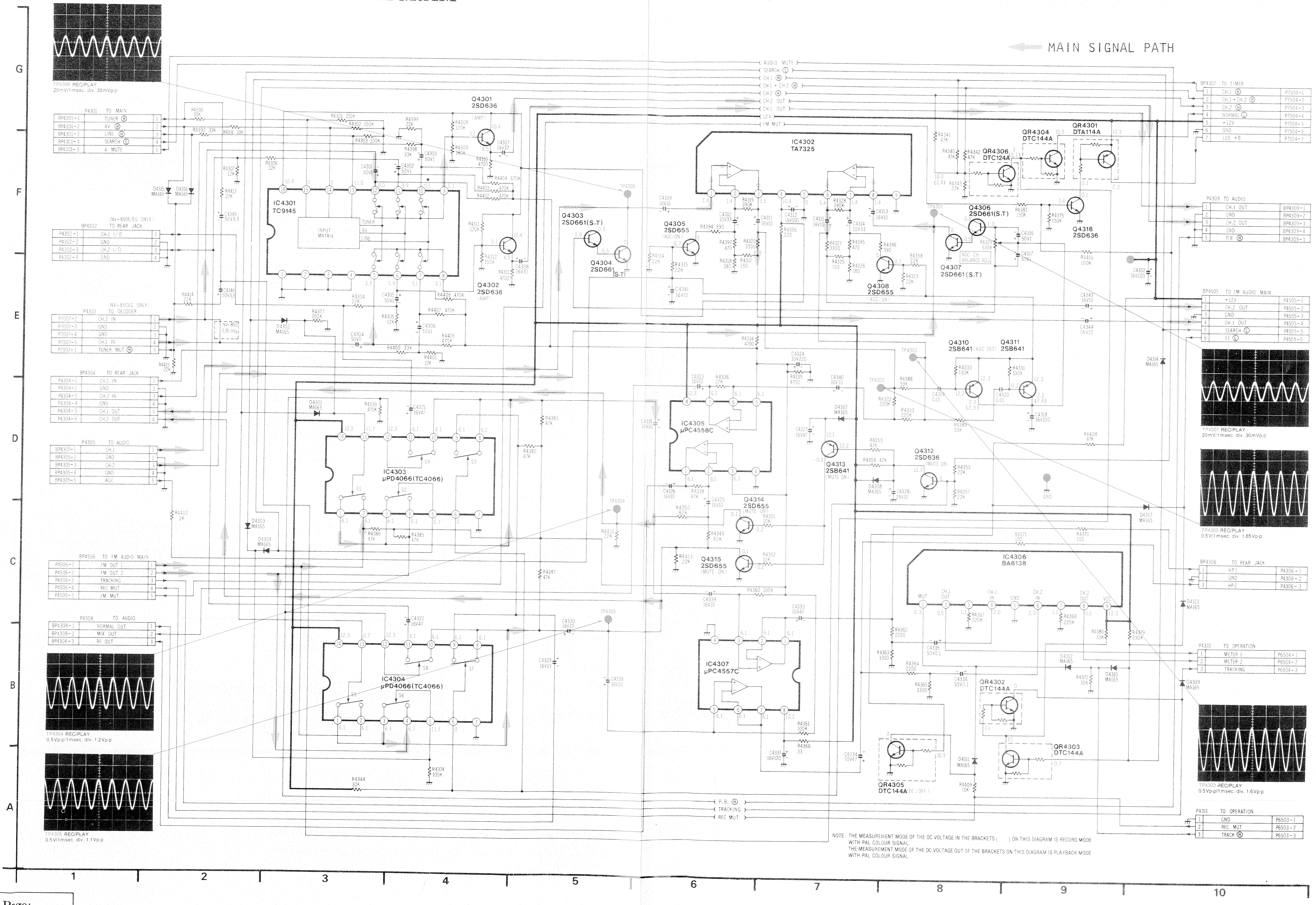
3-17. AUDIO SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE. MAIN SIGNAL PATH IN PLAYBACK MODE.


IC4001
TA7355P
REC
PB
Q4107
2SD655
(E,F)
(REC MUT:ON)
R4129
47K
R4128
1K
R4017
15K
L4001
10m
C4012
0.022
R4014
220
R4015
4700
R4016
1800
C4011
6V47
R4012
10K
R4013
3.3M
C4018
0.068
R4011
12K
C4010
16V10
C4009
10V33
R4023
560
L4004 10m
L4003
10m
C4021
0.01
C4022
0.027
TP4001
R4126
1000
TO BP1-2
AUDIO OUT
BP4308
NORMAL OUT
MIX OUT
RF OUT
P4308 - 1
P4308 - 2
P4308 - 3
IC4002
μPC1514
1/2 Vcc
R/P
Vcc
AGC
P
R
TO SERVO
CTL HEAD
BP1504 TO A/C HEAD
P1504 - 6
P1504 - 5
P1504 - 4
P1504 - 3
P1504 - 2
P1504 - 1
CTL HEAD
A ERASE
GND
A.HEAD (R)
A.HEAD (W)
GND
TP4002
TP4003
R4005
10
R4116
1K
C4002
10V 220
R4001
100K
C4003
1000P
C4001
16V10
Q4002
2SD655(E.F)
(1V REC)
R4021
1K
C4020
16V220
C4019
16V100
R4003 120K
R4004
3300
C4006
0.033
R4002
330
C4004
10V33
R4006
1K
(P.B LEV)
C4005
10V33
R4007
10K
R4008
47K
R4009
2200
C4008
50V1
C4110
0.033
Q4106
2SD639
(R)
R4125
33K
C4108
0.015
C4023
0.01
(FE BIAS OSC)
T4102
VLT0202
or EIQ7QF002B
C4109
0.022
200V
L4101
470μ
C4111
16V10
C4017
180P 500V
R4018
100K
(BIAS)
C4023
0.01
C4015
2200P
630V
C4014
4700P
R4019
22K
C4013
0.015
(BIAS OSC)
Q4001
2SD639
(R)
T4102
VLT0201
or EIQ7QF003B
L4002
470μ
C4016
16V10
BP4101
FE HEAD
GND
P1505 - 1
P1505 - 2
TO INPUT SW
AUDIO IN
FROM INPUT SELECT SW
AUDIO IN
SELECTED SIG
12V
A. MUT
DELAYED REC
EE Ⓗ
P.B Ⓗ
BP4502 TO FM AUDIO MAIN
P4502 - 8
P4502 - 7
P4502 - 6
P4502 - 5
P4502 - 4
P4502 - 3
P4502 - 2
P4502 - 1
REC MUT Ⓗ
EE Ⓗ
CUR. EMP
DELAYED REC
EXCEPT REC
12V
GND
SHIFTED PG
FROM SYSTEM CONTROL
DELAYED A REC 12V
A DUB Ⓗ 5V
INDEX Ⓗ 5V
P.B Ⓗ (AV)
BP4309 TO FM AUDIO SUB
P4309 - 1
P4309 - 2
P4309 - 3
P4309 - 4
P4309 - 5
CH 1 IN
GND
CH 2 IN
GND
P.B Ⓗ
D4101
MA165
D4102
MA165
R4122
22K
R4123
47K
R4124
22K
Q4105
2SD636
(A-DUB:ON)
R4109
3300
C4102
16V100
R4104
100K
C4104
10V33
R4107
10K
C4103
1000P
R4105
220
C4105
16V10
C4101
16V10
R4106
22K
R4108
47K
R4101
4700
R4102
100K
R4103
33K
(MIC AMP)
Q4102
2SD636
Q4101
2SB745
(R.S.T)
QR4103
DTC124A
R4117
3300
R4118
5600
R4119
1K
R4116
5K
(REC VOL CH2)
R4112
5K
(REC VOL CH1)
R4113
1K
R4114
3300
R4115
5600
QR4104
DTC124A
REC VOL
BP4305 TO FM AUDIO SUB
CH 1 OUT
GND
CH 2 OUT
GND
AGC Ⓗ
P4305 - 1
P4305 - 2
P4305 - 3
P4305 - 4
P4305 - 5
TAPE PROGRAMME SEARCH(T.P.S)
IC4101
AN6262
R4120
1K
C4106
25V3.3
R4121
220K
C4107
0.015
T.P.S Ⓗ

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.

3-18. FM AUDIO SUB SCHEMATIC DIAGRAM


MAIN SIGNAL PATH
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
TP4306 REC/PLAY
20mV/1msec. div. 30mVp-p
P4301 TO MAIN
BP4301-1 TUNER Ⓗ 1
BP4301-2 AV Ⓗ 2
BP4301-3 LINE Ⓗ 3
BP4301-4 SEARCH Ⓛ 4
BP4301-5 A MUTE 5
(NV-850E/EG ONLY)
BP4302 TO REAR JACK
P4302-1 CH.1 I/O 1
P4302-2 GND 2
P4302-3 CH.2 I/O 3
P4302-4 GND 4
(NV-850EG ONLY)
P4303 TO DECODER
P7007-2 CH.2 IN 1
P7007-3 GND 2
P7007-4 GND 3
P7007-5 CH.1 IN 4
P7007-1 TUNER MUT Ⓗ 5
BP4304 TO REAR JACK
P4304-1 CH.1 IN 1
P4304-2 GND 2
P4304-3 CH.2 IN 3
P4304-4 GND 4
P4304-5 CH.1 OUT 5
P4304-6 CH.2 OUT 6
P4305 TO AUDIO
BP4305-1 CH.1 1
BP4305-2 GND 2
BP4305-3 CH.2 3
BP4305-4 GND 4
BP4305-5 AGC 5
BP4506 TO FM AUDIO MAIN
P4506-1 FM OUT 1 1
P4506-2 FM OUT 2 2
P4506-3 TRACKING 3
P4506-4 REC MUT 4
P4506-5 FM MUT 5
P4308 TO AUDIO
BP4308-1 NORMAL OUT 1
BP4308-2 MIX OUT 2
BP4308-3 RF OUT 3
TP4304 REC/PLAY
0.5Vp-p/1msec. div. 1.2Vp-p
TP4305 REC/PLAY
0.5V/1msec. div. 1.1Vp-p
IC4301
TC9145
INPUT MATRIX
TUNER
AV
LINE
Q4301
2SD636
(AMP)
Q4302
2SD636
(AMP)
Q4303
2SD661(S.T)
Q4304
2SD661(S.T)
Q4305
2SD655
(AGC ON)
IC4302
TA7325
Q4306
2SD661(S.T)
Q4307
2SD661(S.T)
Q4308
2SD655
(AGC ON)
AGC CH BALANCE ADJ.
QR4304
DTC144A
QR4301
DTA114A
QR4306
DTC124A
Q4318
2SD636
IC4303
μPD4066(TC4066)
IC4304
μPD4066(TC4066)
IC4305
μPC4558C
IC4307
μPC4557C
Q4310
2SB641(AGC DET)
Q4311
2SB641
Q4312
2SD636
(MUTE ON)
Q4313
2SB641
(MUTE ON)
Q4314
2SD655
(MUTE ON)
Q4315
2SD655
(MUTE ON)
IC4306
BA6138
MUT
CH.1 OUT
CH.1 IN
GND
CH.2 IN
CH.2 OUT
VCC
QR4302
DTC144A
QR4303
DTC144A
QR4305
DTC144A(EE : OFF)
AUDIO MUT
SEARCH Ⓛ
CH.1 Ⓗ
CH.1 + CH.2 Ⓗ
CH.2 Ⓗ
CH.2 OUT
CH.1 OUT
12V
FM MUT
P.B. Ⓗ
TRACKING
REC MUT
TP4301
TP4302
TP4303
TP4304
TP4305
TP4306
TP4307
GND
D4301 MA165
D4302 MA165
D4303 MA165
D4304 MA165
D4307 MA165
D4308 MA165
D4309 MA165
D4310 MA165
D4311 MA165
D4312 MA165
D4313 MA165
D4314 MA165
D4315 MA165
D4316 MA165
D4317 MA165
R4390 33K
R4392 33K
R4412 1K
R4414 22K
R4415 22K
R4409 10K
R4344 10K
R4374 100K
BP4307 TO TIMER
1 CH.1 Ⓗ P7504-1
2 CH.1 + CH.2 Ⓗ P7504-2
3 CH.2 Ⓗ P7504-3
4 NORMAL Ⓛ P7504-4
5 +12V P7504-5
6 GND P7504-6
7 LED +B P7504-7
P4309 TO AUDIO
1 CH.1 OUT BP4309-1
2 GND BP4309-2
3 CH.2 OUT BP4309-3
4 GND BP4309-4
5 P.B. Ⓗ BP4309-5
BP4505 TO FM AUDIO MAIN
1 +12V P4505-1
2 CH.2 OUT P4505-2
3 GND P4505-3
4 CH.1 OUT P4505-4
5 SEARCH Ⓛ P4505-5
6 EE Ⓛ P4505-6
TP4307 REC/PLAY
20mV/1msec. div. 30mVp-p
TP4302 REC/PLAY
0.5V/1msec. div. 1.65Vp-p
BP4306 TO REAR JACK
1 HP1 P4306-1
2 GND P4306-2
3 HP2 P4306-3
P4310 TO OPERATION
1 METER 1 P6504-1
2 METER 2 P6504-2
3 TRACKING P6504-3
TP4303 REC/PLAY
0.5Vp-p/1msec. div. 1.6Vp-p
P4311 TO OPERATION
1 GND P6503-1
2 REC MUT P6503-2
3 TRACK Ⓗ P6503-3

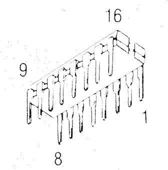
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.

Back Page:
AUDIO Section

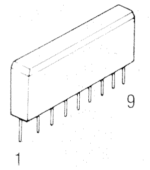
FM AUDIO SUB SCHEMATIC	
Transistor	
Q4301	G-4
Q4302	F-4
Q4303	F-5
Q4304	F-5
Q4305	F-6
Q4306	F-8
Q4307	F-8
Q4308	F-8
Q4310	D-8
Q4311	D-9
Q4312	D-8
Q4313	D-7
Q4314	C-6
Q4315	C-6
Q4318	F-9
Transistor & Resistor	
QR4301	F-9
QR4302	B-9
QR4303	B-9
QR4304	F-9
QR4305	B-8
QR4306	F-9
Integrated Circuit	
IC4301	F-3
IC4302	F-7
IC4303	D-4
IC4304	B-4
IC4305	D-6
IC4306	C-8
IC4307	B-6
Test Point	
TP4301	F-10
TP4302	E-7
TP4303	E-8
TP4304	D-5
TP4305	C-5
TP4306	F-5
TP4307	F-8
TP GND	D-9
Adjustment	
R4329	F-8
Connector	
P4301	G-1
P4303	E-1
P4305	D-1
P4308	B-1
P4309	F-10
P4310	B-10
P4311	B-10
BP4302	F-1
BP4304	D-1
BP4306	C-10
BP4307	G-10
BP4505	E-10
BP4506	C-1

ADDRESS INFORMATION

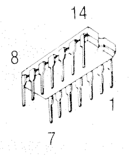
ICs & TRANSISTORs INFORMATION



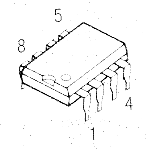
TC9145P



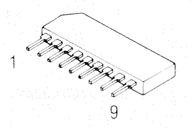
TA7325P



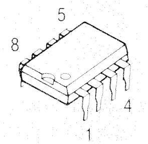
µPD4066BC



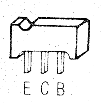
µPC4558C



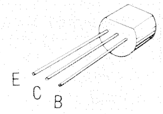
BA6138



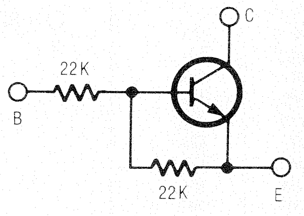
µPC4557C

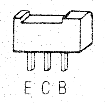


2SD636
2SD661
2SB641

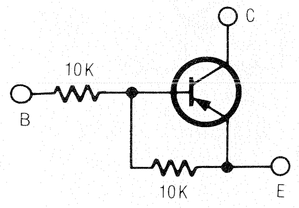


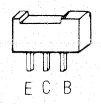
2SD655



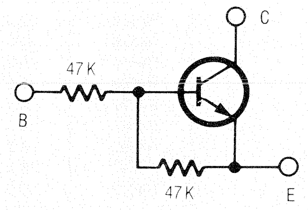


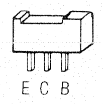
DTC124A





DTA114A



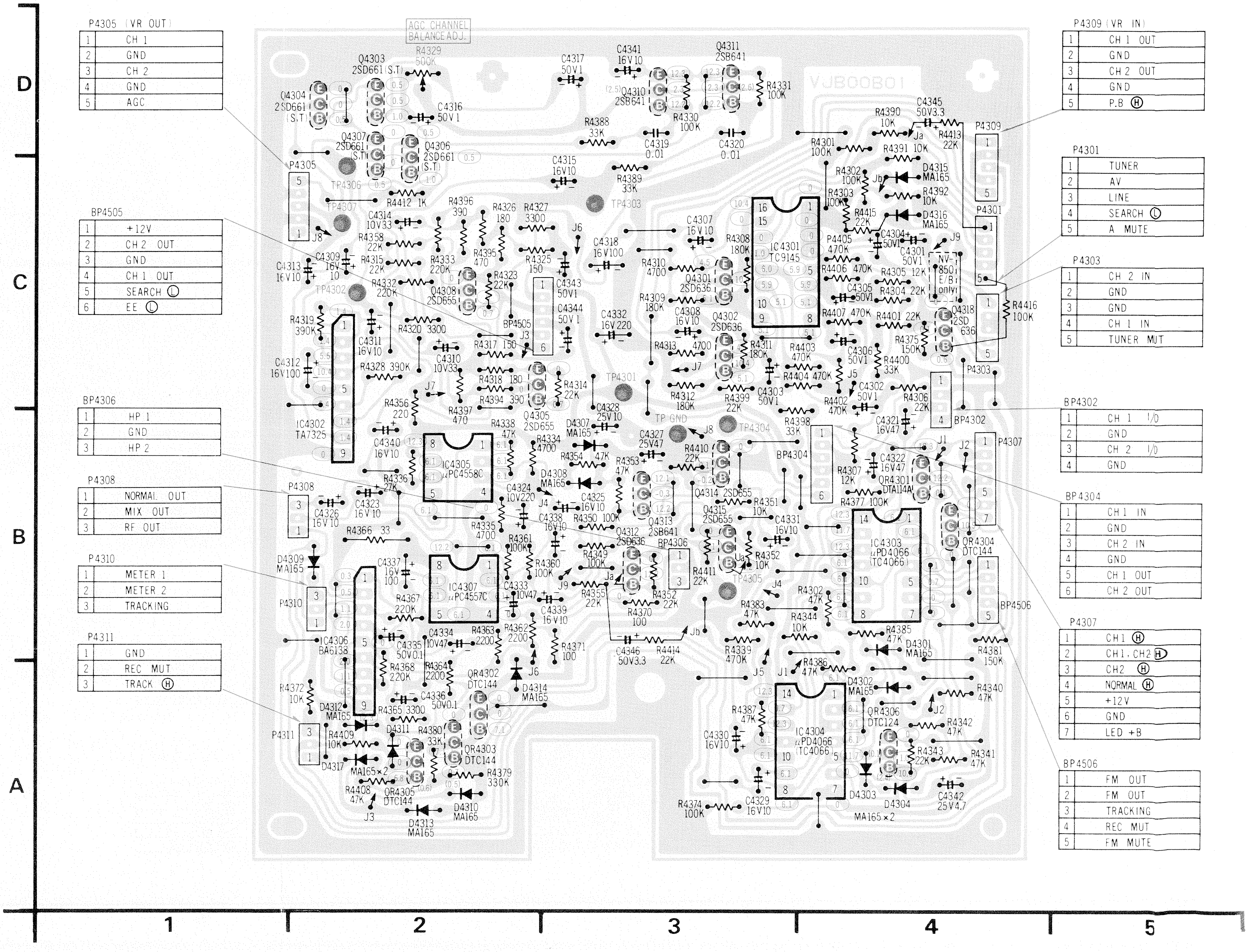


DTC144A

FM AUDIO SUB CIRCUIT BOARD	
Transistor	
Q4301	C-3
Q4302	C-3
Q4303	D-2
Q4304	D-2
Q4305	C-2
Q4306	C-2
Q4307	C-2
Q4308	C-2
Q4310	D-3
Q4311	D-3
Q4312	B-3
Q4313	B-3
Q4314	B-3
Q4315	B-3
Q4318	C-4
Transistor & Resistor	
QR4301	B-4
QR4302	A-2
QR4303	A-2
QR4304	B-4
QR4305	A-2
QR4306	A-4
Integrated Circuit	
IC4301	C-3
IC4302	C-2
IC4303	B-4
IC4304	A-4
IC4305	B-2
IC4306	B-2
IC4307	B-2
Test Point	
TP4301	B-3
TP4302	C-2
TP4303	C-3
TP4304	B-3
TP4305	B-3
TP4306	C-2
TP4307	C-2
TP GND	B-3
Adjustment	
R4329	C-2

ADDRESS INFORMATION

3-19. FM AUDIO SUB CIRCUIT BOARD (VEP00B01A: NV-850EG/VEP00B01B:


D
C
B
A
1
2
3
4
5
VJB00B01
AGC CHANNEL BALANCE ADJ.
R4329 500K
IC4301 TC9145
IC4302 TA7325
IC4303 µPD4066 (TC4066)
IC4304 µPD4066 TC4066
IC4305 µPC4558C
IC4306 BA6138
IC4307 µPC4557C
Q4303 2SD661 (S.T)
Q4304 2SD661 (S.T)
Q4307 2SD661 (S.T)
Q4306 2SD661 (S.T)
Q4310 2SB641
Q4311 2SB641
Q4301 2SD636
Q4302 2SD636
Q4308 2SD655
Q4305 2SD655
Q4312 2SB641
Q4313
Q4314 2SD655
Q4315 2SD655
Q4318 2SD636
QR4301 DTA114A
QR4302 DTC144
QR4303 DTC144
QR4304 DTC144
QR4305 DTC144
QR4306 DTC124
TP4301
TP4302
TP4303
TP4304
TP4305
TP4306
TP4307
TP GND
NV-F850 E/B only
P4305
P4308
P4309
P4301
P4303
P4307
P4310
P4311
BP4302
BP4304
BP4305
BP4306
BP4506
J1
J2
J3
J4
J5
J6
J7
J8
J9
Ja
Jb

P4305 (VR OUT)

1	CH 1
2	GND
3	CH 2
4	GND
5	AGC

BP4505

1	+12V
2	CH 2 OUT
3	GND
4	CH 1 OUT
5	SEARCH Ⓛ
6	EE Ⓛ

BP4306

1	HP 1
2	GND
3	HP 2

P4308

1	NORMAL OUT
2	MIX OUT
3	RF OUT

P4310

1	METER 1
2	METER 2
3	TRACKING

P4311

1	GND
2	REC MUT
3	TRACK Ⓗ

P4309 (VR IN)

1	CH 1 OUT
2	GND
3	CH 2 OUT
4	GND
5	P.B Ⓗ

P4301

1	TUNER
2	AV
3	LINE
4	SEARCH Ⓛ
5	A MUTE

P4303

1	CH 2 IN
2	GND
3	GND
4	CH 1 IN
5	TUNER MUT

BP4302

1	CH 1 I/O
2	GND
3	CH 2 I/O
4	GND

BP4304

1	CH1 IN
2	GND
3	CH 2 IN
4	GND
5	CH 1 OUT
6	CH 2 OUT

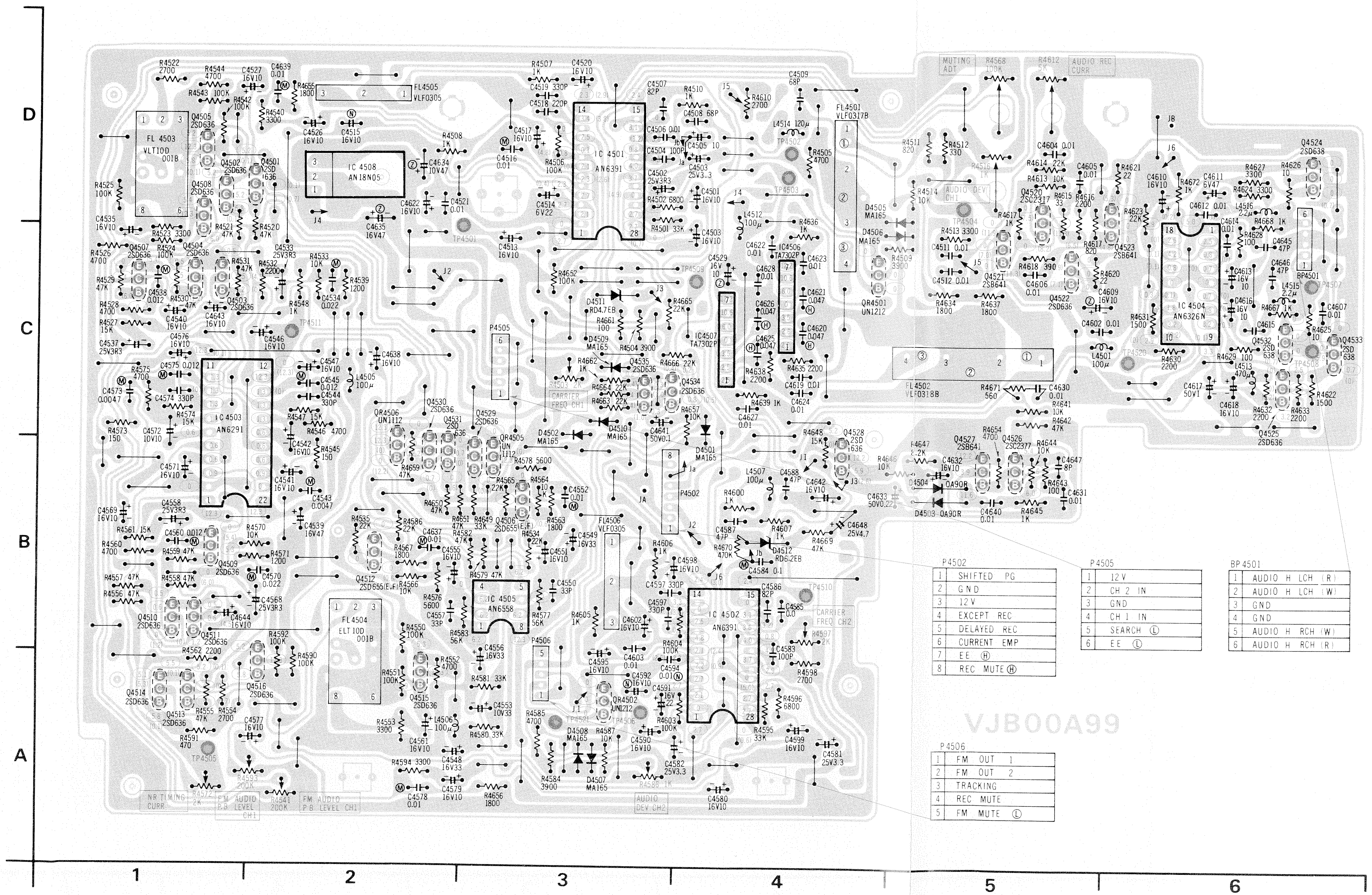
P4307

1	CH1 Ⓗ
2	CH1, CH2 Ⓗ
3	CH2 Ⓗ
4	NORMAL Ⓗ
5	+12V
6	GND
7	LED +B

BP4506

1	FM OUT
2	FM OUT
3	TRACKING
4	REC MUT
5	FM MUTE

3-20. FM AUDIO MAIN CIRCUIT BOARD (VEP00A99A)


D
C
B
A
1
2
3
4
5
6
VJB00A99
IC 4501 AN6391
IC 4502 AN6391
IC 4503 AN6291
IC 4504 AN6326N
IC 4505 AN6558
IC 4508 AN18N05
FL 4503 VLT100 001B
FL 4504 ELT100 001B
FL4505 VLF0305
FL4506 VLF0305
FL4501 VLF0317B
FL4502 VLF0318B
MUTING ADJ
AUDIO DEV CH1
AUDIO DEV CH2
AUDIO REC CURR
CARRIER FREQ CH1
CARRIER FREQ CH2
NR TIMING
REC CURR
FM AUDIO P.B LEVEL CH1
FM AUDIO P.B LEVEL CH2

P4502

1	SHIFTED PG
2	GND
3	12V
4	EXCEPT REC
5	DELAYED REC
6	CURRENT EMP
7	EE Ⓗ
8	REC MUTE Ⓗ

P4505

1	12V
2	CH 2 IN
3	GND
4	CH 1 IN
5	SEARCH Ⓛ
6	EE Ⓛ

BP4501

1	AUDIO H LCH (R)
2	AUDIO H LCH (W)
3	GND
4	GND
5	AUDIO H RCH (W)
6	AUDIO H RCH (R)

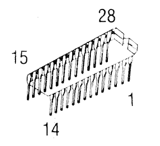
P4506

1	FM OUT 1
2	FM OUT 2
3	TRACKING
4	REC MUTE
5	FM MUTE Ⓛ

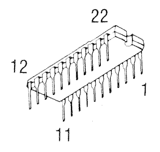
FM AUDIO MAIN CIRCUIT BOARD	
Transistor	
Q4501	D-1
Q4502	D-1
Q4503	C-1
Q4504	C-1
Q4505	D-1
Q4506	B-3
Q4507	C-1
Q4508	D-1
Q4509	B-1
Q4510	B-1
Q4511	B-1
Q4512	B-2
Q4513	A-1
Q4514	A-1
Q4515	A-2
Q4516	A-2
Q4520	C-5
Q4521	C-5
Q4522	C-5
Q4523	C-5
Q4524	D-6
Q4525	C-6
Q4526	B-5
Q4527	B-5
Q4528	C-4
Q4529	B-3
Q4530	B-2
Q4531	B-2
Q4532	C-6
Q4533	C-6
Q4534	C-3
Q4535	C-3
Transistor & Resistor	
QR4501	C-4
QR4502	A-3
QR4505	B-3
QR4506	B-2
Integrated Circuit	
IC4501	D-3
IC4502	A-4
IC4503	C-1
IC4504	C-6
IC4505	B-3
IC4506	C-4
IC4507	C-4
IC4508	D-2
Test Point	
TP4501	C-2
TP4502	D-4
TP4503	D-4
TP4504	D-5
TP4505	A-1
TP4506	A-3
TP4507	C-6
TP4508	C-6
TP4509	C-4
TP4510	B-4
TP4511	C-2
TP4520	C-6
TP4521	A-3
Adjustment	
R4503	C-3
R4516	D-5
R4541	A-2
R4568	D-5
R4572	A-1
R4586	A-3
R4593	A-2
R4597	B-4
R4612	D-5

ADDRESS INFORMATION

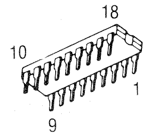
ICs & TRANSISTORs INFORMATION



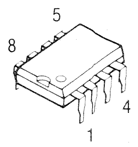
AN6391



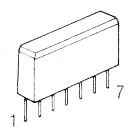
AN6291



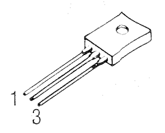
AN6326N



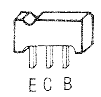
AN6558



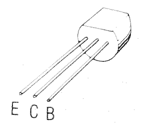
TC7302P



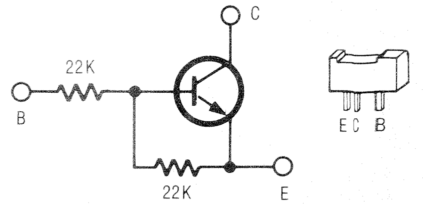
AN78N05



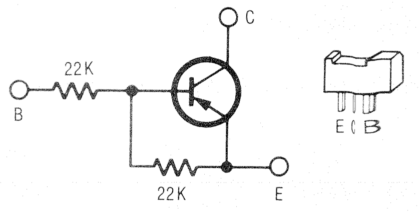
2SD636
2SC2377
2SB641
2SD638



2SD655


C
22K
B
22K
E
E C B

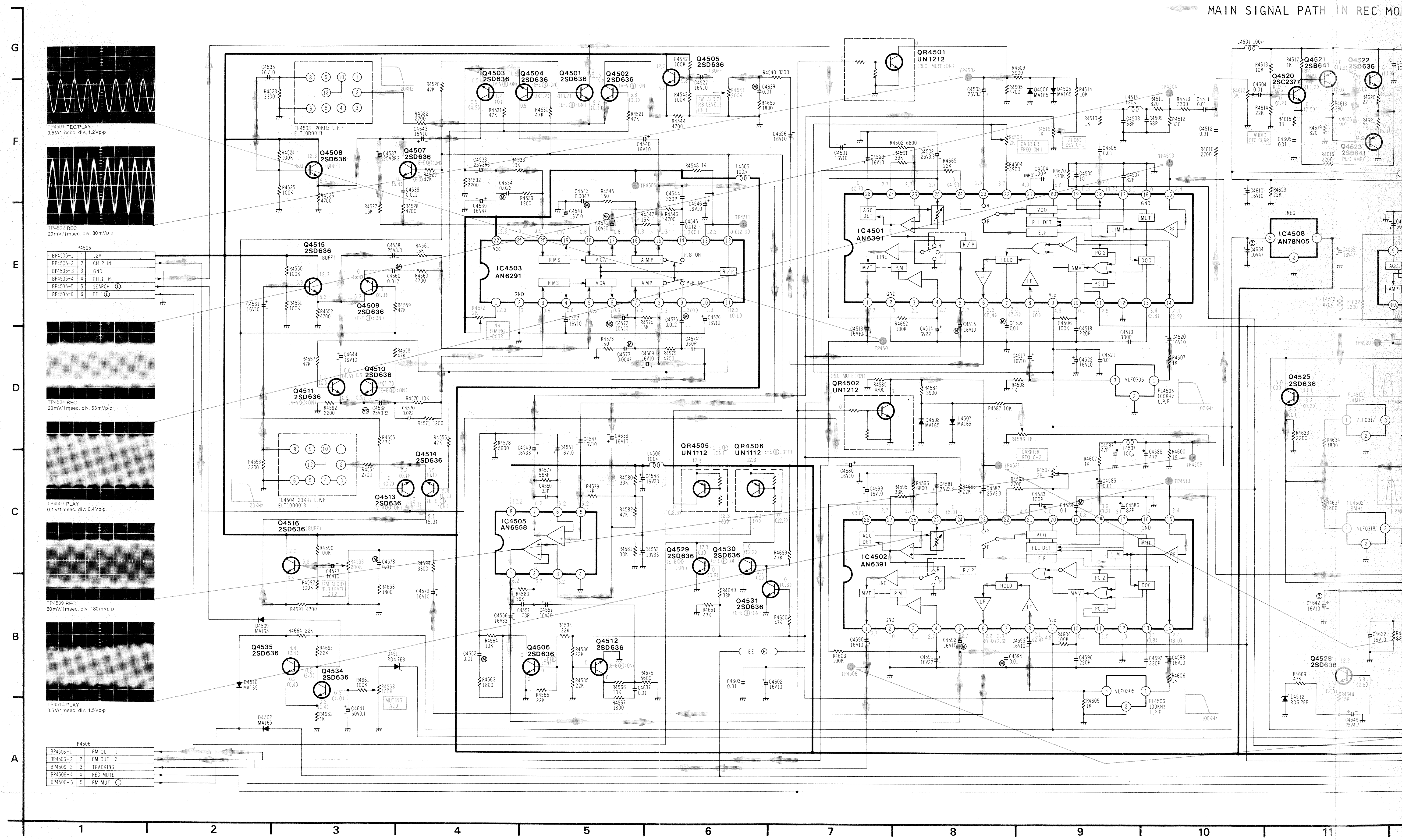
DTC124A

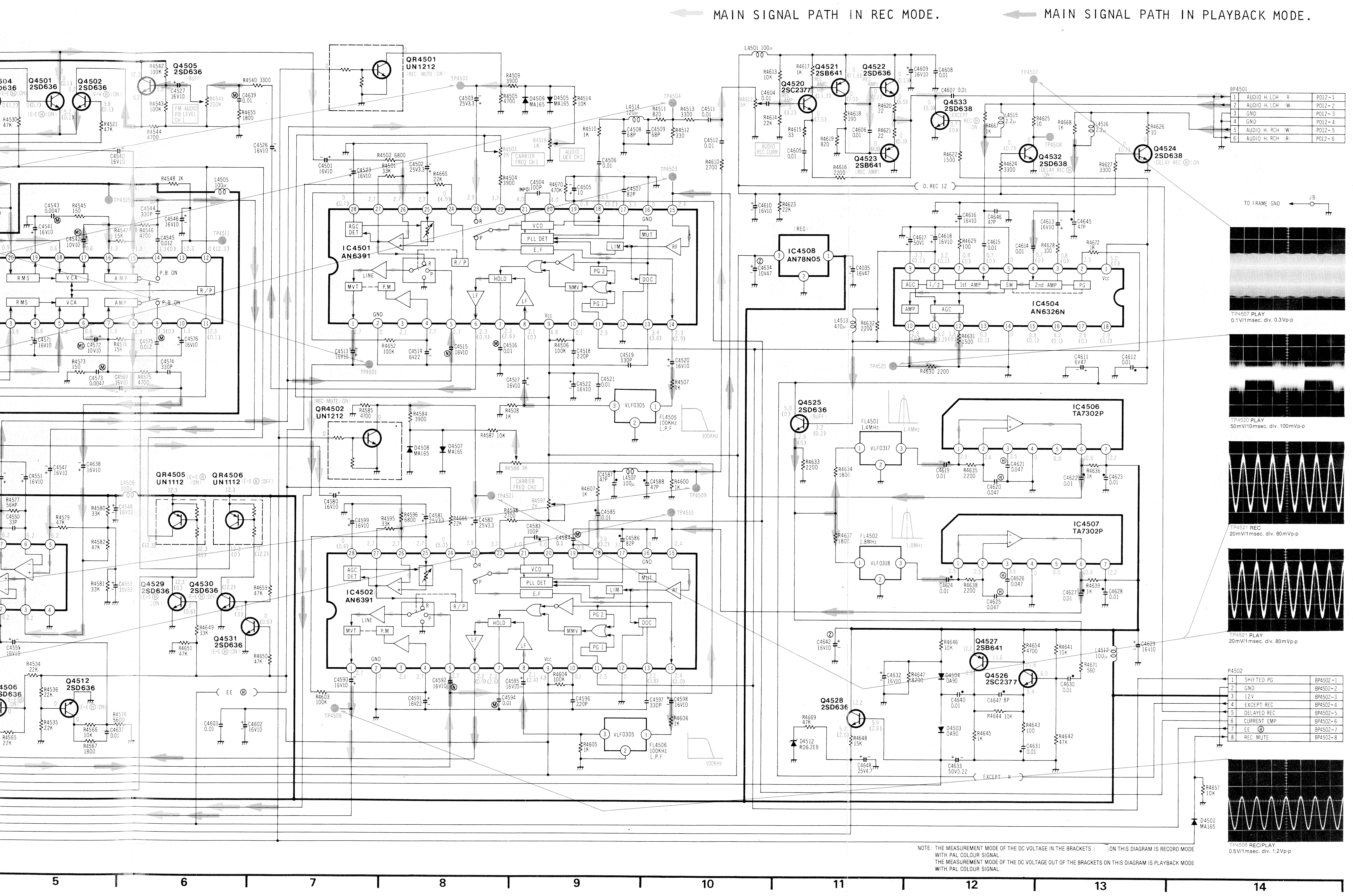

C
22K
B
22K
E
E C B

DTA124A

Back Page:
FM AUDIO SUB Section

3-21. FM AUDIO MAIN SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MO
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
TP4501 REC/PLAY
0.5V/1msec. div. 1.2Vp-p
TP4502 REC
20mV/1msec. div. 80mVp-p
TP4504 REC
20mV/1msec. div. 63mVp-p
TP4503 PLAY
0.1V/1msec. div. 0.4Vp-p
TP4509 REC
50mV/1msec. div. 180mVp-p
TP4510 PLAY
0.5V/1msec. div. 1.5Vp-p
P4505
BP4505-1 1 12V
BP4505-2 2 CH.2 IN
BP4505-3 3 GND
BP4505-4 4 CH.1 IN
BP4505-5 5 SEARCH Ⓛ
BP4505-6 6 EE Ⓛ
P4506
BP4506-1 1 FM OUT 1
BP4506-2 2 FM OUT 2
BP4506-3 3 TRACKING
BP4506-4 4 REC MUTE
BP4506-5 5 FM MUT Ⓛ
FL4503 20KHz L.P.F ELT10D001B
FL4504 20KHz L.P.F ELT10D001B
Q4503 2SD636
Q4504 2SD636
Q4501 2SD636
Q4502 2SD636
Q4505 2SD636 (BUFF)
Q4508 2SD636 (BUFF)
Q4507 2SD636
Q4515 2SD636 (BUFF)
Q4509 2SD636
Q4510 2SD636
Q4511 2SD636
Q4514 2SD636
Q4513 2SD636
Q4516 2SD636 (BUFF)
Q4535 2SD636
Q4534 2SD636
Q4506 2SD636
Q4512 2SD636
Q4529 2SD636
Q4530 2SD636
Q4531 2SD636
Q4525 2SD636 (BUFF)
Q4528 2SD636
Q4520 2SC2377
Q4521 2SB641
Q4522 2SD636
Q4523 2SB641 (REC AMP)
QR4501 UN1212 (REC MUTE:ON)
QR4502 UN1212 (REC MUTE:ON)
QR4505 UN1112
QR4506 UN1112
IC4503 AN6291
IC4505 AN6558
IC4501 AN6391
IC4502 AN6391
IC4508 AN78N05 (REG)
RMS
VCA
AMP
P.B ON
R/P
AGC DET
VCO
PLL DET
E.F
MUT
LIM
RF
HOLD
DOC
PG 2
PG 1
NMV
LF
LINE
MVT
P.M
GND
Vcc
NR TIMING CURR
FM AUDIO RB LEVEL CH 1
FM AUDIO P.B LEVEL CH 2
AUDIO DEV CH1
CARRIER FREQ CH 1
CARRIER FREQ CH 2
AUDIO REC CURR
MUTING ADJ
VLF0305
FL4505 100KHz L.P.F
FL4506 100KHz L.P.F
FL4501 1.4MHz
FL4502 1.8MHz
VLF0317
VLF0318
TP4501
TP4502
TP4503
TP4504
TP4505
TP4506
TP4509
TP4510
TP4511
TP4520
TP4521
D4506 MA165
D4505 MA165
D4508 MA165
D4507 MA165
D4509 MA165
D4510 MA165
D4502 MA165
D4511 RD4.7EB
D4512 RD6.2EB
L4505 100μ
L4506 100μ
L4507 100μ
L4514 120μ
L4501 100μ
L4513 470μ
20KHz
100KHz
EE Ⓜ


MAIN SIGNAL PATH IN REC MODE.
MAIN SIGNAL PATH IN PLAYBACK MODE.
QR4501 UN1212
QR4502 UN1212
QR4505 UN1112
QR4506 UN1112
Q4501 2SD636
Q4502 2SD636
Q4505 2SD636
Q4512 2SD636
Q4520 2SC2377
Q4521 2SB641
Q4522 2SD636
Q4523 2SB641
Q4524 2SD638
Q4525 2SD636
Q4526 2SC2377
Q4527 2SB641
Q4528 2SD636
Q4529 2SD636
Q4530 2SD636
Q4531 2SD636
Q4532 2SD638
Q4533 2SD638
IC4501 AN6391
IC4502 AN6391
IC4504 AN6326N
IC4506 TA7302P
IC4507 TA7302P
IC4508 AN78N05
VLF0305
VLF0317
VLF0318
FL4501 1.4MHz
FL4502 1.8MHz
FL4505 100KHz L.P.F
FL4506 100KHz L.P.F
BP4501
AUDIO H. LCH (R)
AUDIO H. LCH (W)
GND
GND
AUDIO H. RCH (W)
AUDIO H. RCH (R)
P4502
SHIFTED PG
GND
12V
EXCEPT REC
DELAYED REC
CURRENT EMP
EE
REC MUTE
TO FRAME GND
TP4507 PLAY 0.1V/1msec. div. 0.3Vp-p
TP4520 PLAY 50mV/10msec. div. 100mVp-p
TP4521 REC 20mV/1msec. div. 80mVp-p
TP4521 PLAY 20mV/1msec. div. 80mVp-p
TP4506 REC/PLAY 0.5V/1msec. div. 1.2Vp-p
5
6
7
8
9
10
11
12
13
14

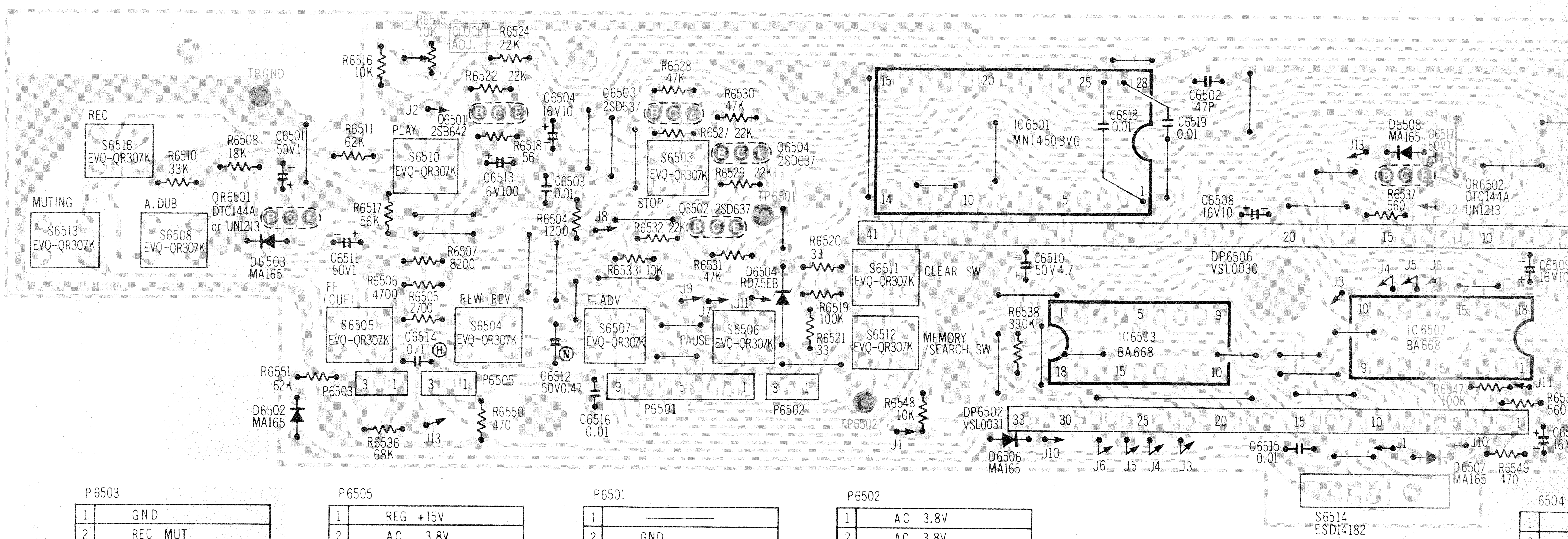
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.

FM AUDIO MAIN SCHEMATIC	
Transistor	
Q4501	F-5
Q4502	F-5
Q4503	F-4
Q4504	F-4
Q4505	F-6
Q4506	B-5
Q4507	F-4
Q4508	F-3
Q4509	E-3
Q4510	D-3
Q4511	D-3
Q4512	B-5
Q4513	C-4
Q4514	C-4
Q4515	E-3
Q4516	C-3
Q4520	F-11
Q4521	F-11
Q4522	F-11
Q4523	F-11
Q4524	F-13
Q4525	D-11
Q4526	B-12
Q4527	B-12
Q4528	B-11
Q4529	C-6
Q4530	C-6
Q4531	C-6
Q4532	F-12
Q4533	F-12
Q4534	B-3
Q4535	B-3
Transistor & Resistor	
QR4501	G-7
QR4502	D-7
QR4505	C-6
QR4506	C-6
Integrated Circuit	
IC4501	E-8
IC4502	C-8
IC4503	E-6
IC4504	E-12
IC4505	C-5
IC4506	D-13
IC4507	C-13
IC4508	E-11
Test Point	
TP4501	D-7
TP4502	F-8
TP4503	F-10
TP4504	F-10
TP4505	F-5
TP4506	B-7
TP4507	F-12
TP4508	F-12
TP4509	D-10
TP4510	D-10
TP4511	E-6
TP4520	D-11
TP4521	C-8
Adjustment	
R4503	F-8
R4516	F-9
R4541	F-6
R4568	B-3
R4572	E-4
R4586	D-8
R4593	B-3
R4597	C-9
R4612	F-12
Connector	
P4502	B-14
P4505	E-1
P4506	A-1
BP4501	F-14

ADDRESS INFORMATION

Next Page:
OPERATION Section

3-22. OPERATION CIRCUIT BOARD (VEP06212A)


TPGND
REC
S6516 EVQ-QR307K
R6510 33K
R6508 18K
C6501 50V1
MUTING
S6513 EVQ-QR307K
A.DUB
S6508 EVQ-QR307K
QR6501 DTC144A or UN1213
D6503 MA165
R6516 10K
R6515 10K
CLOCK ADJ.
R6524 22K
R6522 22K
J2
Q6501 2SB642
R6511 62K
PLAY
S6510 EVQ-QR307K
R6518 56
C6513 6V100
C6504 16V10
C6503 0.01
R6517 56K
C6511 50V1
R6507 8200
R6506 4700
R6505 2700
FF (CUE)
S6505 EVQ-QR307K
C6514 0.1 Ⓗ
REW (REV)
S6504 EVQ-QR307K
R6504 1200
J8
C6512 50V0.47
Ⓝ
R6551 62K
P6503
P6505
D6502 MA165
R6536 68K
J13
R6550 470
C6516 0.01
Q6503 2SD637
R6528 47K
R6530 47K
R6527 22K
Q6504 2SD637
S6503 EVQ-QR307K
R6529 22K
STOP
Q6502 2SD637
R6532 22K
TP6501
R6533 10K
R6531 47K
D6504 RD7.5EB
J9
J7
J11
F.ADV
S6507 EVQ-QR307K
PAUSE
S6506 EVQ-QR307K
P6501
P6502
R6520 33
R6519 100K
R6521 33
S6511 EVQ-QR307K
CLEAR SW
S6512 EVQ-QR307K
MEMORY /SEARCH SW
TP6502
R6548 10K
J1
IC6501 MN1450BVG
C6518 0.01
C6519 0.01
C6502 47P
C6508 16V10
C6510 50V4.7
DP6506 VSL0030
R6538 390K
IC6503 BA668
DP6502 VSL0031
D6506 MA165
J10
J6 J5 J4 J3
C6515 0.01
D6508 MA165
C6517 50V1
J13
R6537 560
QR6502 DTC144A UN1213
J2
J4 J5 J6
J3
IC6502 BA668
R6547 100K
J11
D6507 MA165
R6549 470
S6514 ESD14182
C6509 16V10

P6503

1	GND
2	REC MUT
3	TRACK Ⓗ

P6505

1	REG +15V
2	AC 3.8V
3	AC 3.8V

P6501

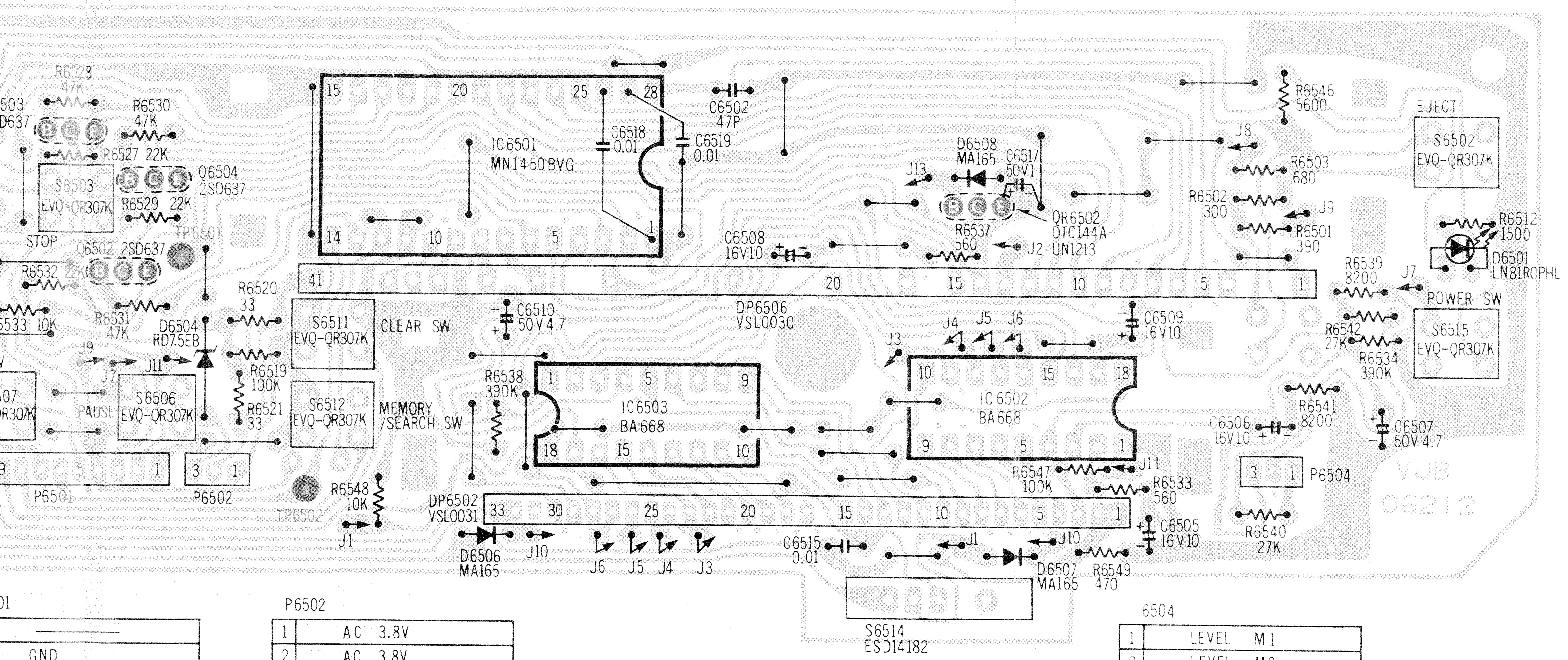
1	———
2	GND
3	POWER ON Ⓛ
4	KEY SCAN
5	5V REC
6	POWER LED 12V
7	SERIAL DATA
8	SERIAL CLOCK
9	MEMORY SW
10	CLEAR SW

P6502

1	AC 3.8V
2	AC 3.8V
3	REG -30V

6504

1
2
3


R6528
47K
503
D637
R6530
47K
R6527 22K
Q6504
2SD637
S6503
EVQ-QR307K
R6529 22K
TP6501
STOP
Q6502 2SD637
R6532 22K
R6520
33
R6531
47K
D6504
RD7.5EB
5533 10K
J9
J7
J11
R6519
100K
R6521
33
S6506
EVQ-QR307K
PAUSE
07
R307K
P6501
P6502
TP6502
R6548
10K
J1
S6511
EVQ-QR307K
CLEAR SW
S6512
EVQ-QR307K
MEMORY
/SEARCH SW
IC6501
MN1450BVG
C6518
0.01
C6519
0.01
C6502
47P
C6510
50V4.7
DP6506
VSL0030
C6508
16V10
D6508
MA165
C6517
50V1
J13
QR6502
DTC144A
UN1213
R6537
560
J2
R6546
5600
J8
R6503
680
R6502
300
J9
R6501
390
EJECT
S6502
EVQ-QR307K
R6512
1500
D6501
LN81RCPHL
R6539
8200
J7
POWER SW
S6515
EVQ-QR307K
R6542
27K
R6534
390K
R6541
8200
C6509
16V10
J4
J5
J6
J3
IC6502
BA668
R6538
390K
IC6503
BA668
C6506
16V10
C6507
50V4.7
R6547
100K
J11
R6533
560
P6504
C6505
16V10
R6540
27K
DP6502
VSL0031
D6506
MA165
J10
J6
J5
J4
J3
C6515
0.01
J1
J10
D6507
MA165
R6549
470
S6514
ESD14182
VJB
06212

01

——
GND
POWER ON Ⓛ
KEY SCAN
5V REC
POWER LED 12V
SERIAL DATA
SERIAL CLOCK
MEMORY SW
CLEAR SW

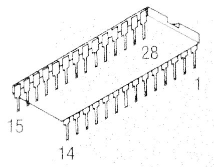
P6502

1	AC 3.8V
2	AC 3.8V
3	REG -30V

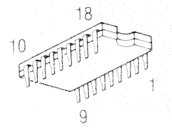
6504

1	LEVEL M1
2	LEVEL M2
3	TRACKING

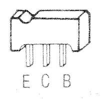
ICs & TRANSISTORs INFORMATION



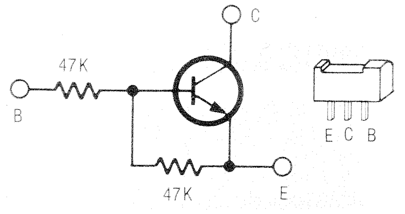
MN1450BVG



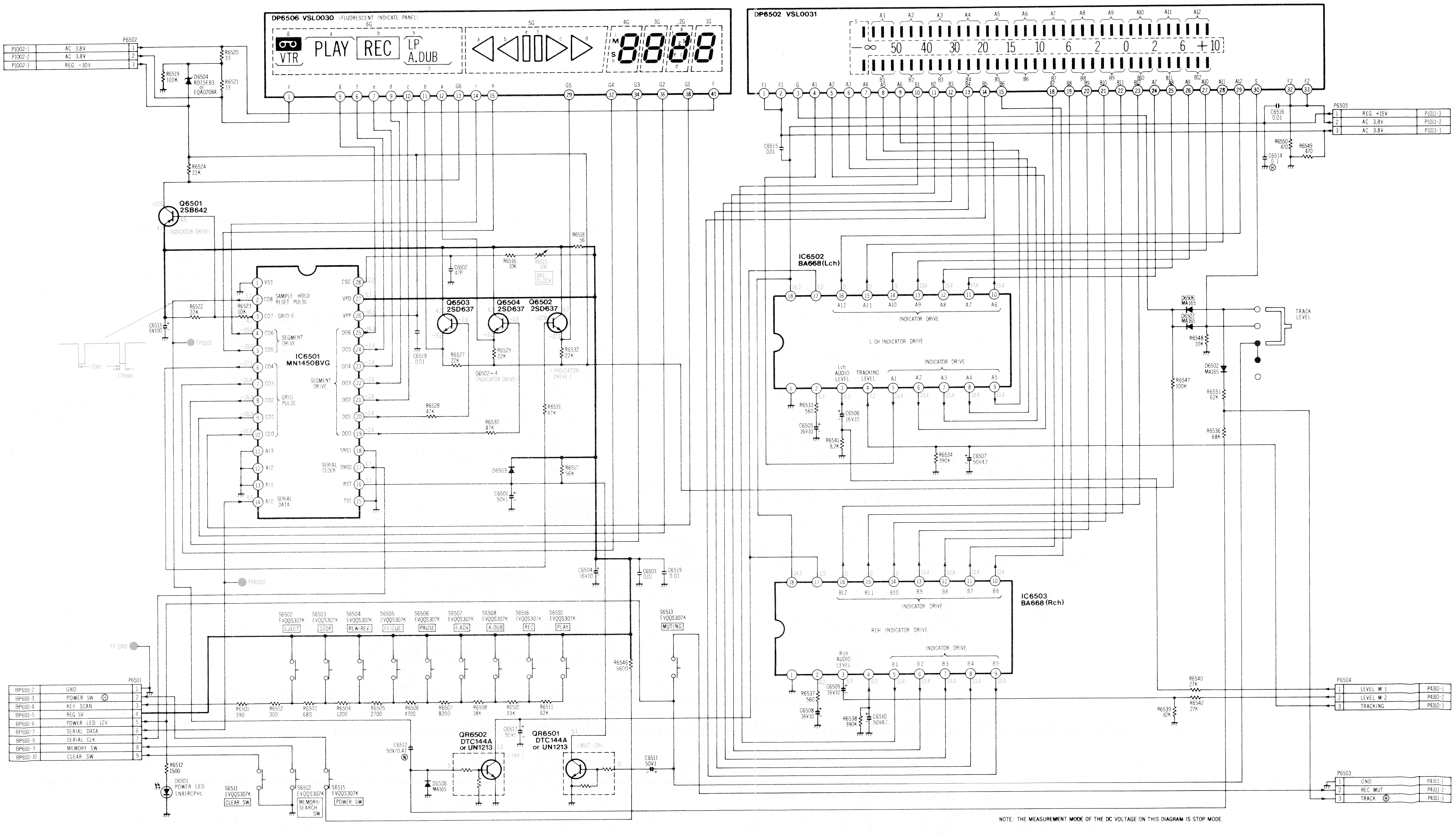
BA668A



2SB642
2SD637

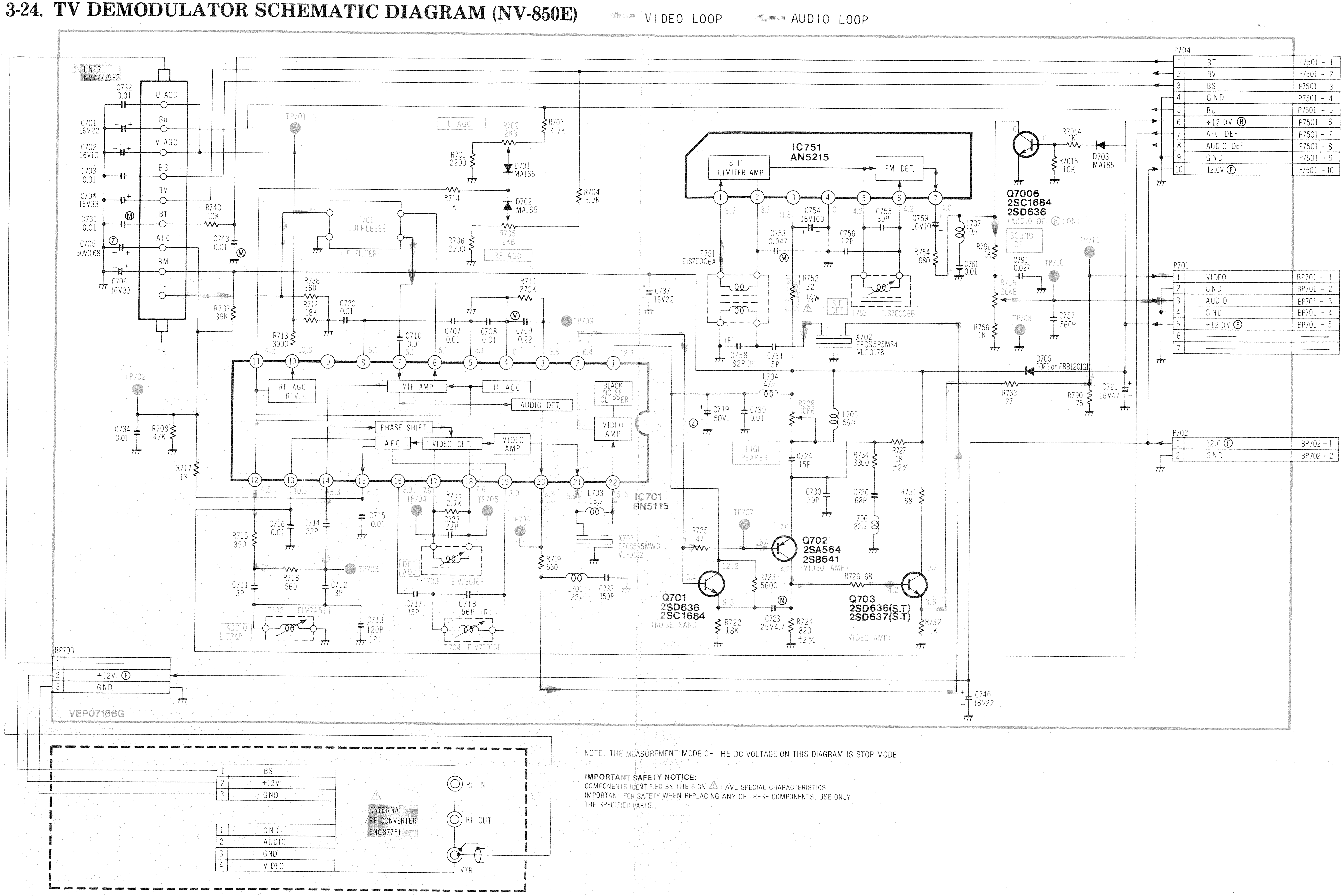

47K
B
C
47K
E
E C B
DTC144A

3-23. OPERATION SCHEMATIC DIAGRAM


DP6506 VSL0030 (FLUORESCENT INDICATE PANEL)
VTR
PLAY
REC
LP
A.DUB
8888
DP6502 VSL0031
∞ 50 40 30 20 15 10 6 2 0 2 6 +10
P1002-1 AC 3.8V
P1002-2 AC 3.8V
P1002-3 REG -30V
P6502
R6519 100K
D6504 RD7.5EB3 or EQA0208A
R6520 33
R6521 33
R6524 22K
Q6501 2SB642
INDICATOR DRIVE
R6518 56
C6502 47P
R6516 10K
R6512 10K
OPE CLOCK
IC6501 MN1450BVG
VSS
CO8 SAMPLE HOLD RESET PULSE
CO7 GRID 6
CO6 SEGMENT DRIVE
CO5
CO4
CO3
CO2 GRID PULSE
CO1
CO0
A13
A12
A11
A10 SERIAL DATA
CSC
VPD
VPP
DO6
DO5
DO4
DO3 SEGMENT DRIVE
DO2
DO1
DO0
SNS1
SNS0 SERIAL CLOCK
RST
TST
R6522 22K
R6523 10K
C6533 6V100
TP6501
2sec
17msec
Q6503 2SD637
Q6504 2SD637
Q6502 2SD637
C6518 0.01
R6527 22K
R6529 22K
R6532 22K
Q6502~4 INDICATOR DRIVE
INDICATOR DRIVE
R6528 47K
R6530 47K
R6531 47K
D6503
R6517 56K
C6501 50V1
C6504 16V10
C6503 0.01
C6519 0.01
TP6502
TP GND
S6502 EVQQS307K EJECT
S6503 EVQQS307K STOP
S6504 EVQQS307K REW/REV
S6505 EVQQS307K FF/CUE
S6506 EVQQS307K PAUSE
S6507 EVQQS307K F.ADV
S6508 EVQQS307K A.DUB
S6516 EVQQS307K REC
S6510 EVQQS307K PLAY
S6513 EVQQS307K MUTING
R6546 5600
P6501
BP6501-2 GND
BP6501-3 POWER SW Ⓛ
BP6501-4 KEY SCAN
BP6501-5 REG 5V
BP6501-6 POWER LED 12V
BP6501-7 SERIAL DATA
BP6501-8 SERIAL CLK
BP6501-9 MEMORY SW
BP6501-10 CLEAR SW
R6501 390
R6502 300
R6503 680
R6504 1200
R6505 2700
R6506 4700
R6507 8200
R6508 18K
R6510 33K
R6511 62K
R6512 1500
D6501 POWER LED LN81RCPHL
S6511 EVQQS307K CLEAR SW
S6512 EVQQS307K MEMORY SEARCH SW
S6515 EVQQS307K POWER SW
C6512 50V0.47 Ⓝ
QR6502 DTC144A or UN1213
D6508 MA165
C6517 50V1
QR6501 DTC144A or UN1213
MUT(ON)
C6511 50V1
C6515 0.01
C6516 0.01
P6505
REG +15V P1011-3
AC 3.8V P1011-2
AC 3.8V P1011-1
R6550 470
R6549 470
C6514 0.1 Ⓜ
IC6502 BA668(Lch)
A12 A11 A10 A9 A8 A7 A6
INDICATOR DRIVE
L CH INDICATOR DRIVE
Lch AUDIO LEVEL
TRACKING LEVEL
A1 A2 A3 A4 A5
R6533 560
C6506 16V10
C6505 16V10
R6541 8.2K
R6534 390K
C6507 50V4.7
D6506 MA165
D6507 MA165
TRACK LEVEL
R6548 10K
D6502 MA165
R6547 100K
R6551 62K
R6536 68K
IC6503 BA668(Rch)
B12 B11 B10 B9 B8 B7 B6
RCH INDICATOR DRIVE
Rch AUDIO LEVEL
B1 B2 B3 B4 B5
R6537 560
C6509 16V10
C6508 16V10
R6538 390K
C6510 50V4.7
R6540 27K
R6542 27K
R6539 82K
P6504
LEVEL M 1 P4310-1
LEVEL M 2 P4310-2
TRACKING P4310-3
P6503
GND P4311-1
REC MUT P4311-2
TRACK Ⓜ P4311-3

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE

3-24. TV DEMODULATOR SCHEMATIC DIAGRAM (NV-850E)

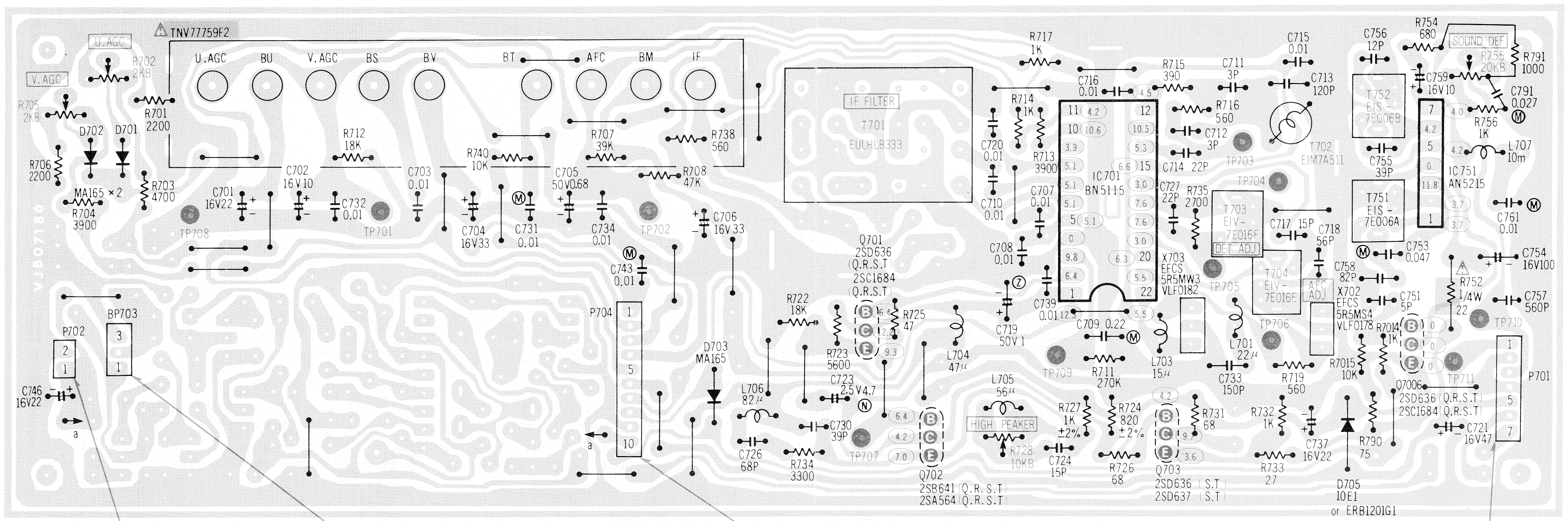

VIDEO LOOP
AUDIO LOOP
TUNER TNV77759F2
U AGC
Bu
V AGC
BS
BV
BT
AFC
BM
IF
TP
C732 0.01
C701 16V22
C702 16V10
C703 0.01
C704 16V33
C731 0.01
C705 50V0.68
C706 16V33
R740 10K
C743 0.01
TP701
TP702
U. AGC
R702 2KB
R703 4.7K
R701 2200
D701 MA165
R714 1K
D702 MA165
R704 3.9K
R706 2200
R705 2KB
RF AGC
T701 EULHLB333
IF FILTER
R738 560
R712 18K
C720 0.01
R711 270K
R707 39K
R713 3900
C710 0.01
C707 0.01
C708 0.01
C709 0.22
TP709
C734 0.01
R708 47K
R717 1K
RF AGC (REV.)
VIF AMP
IF AGC
AUDIO DET.
BLACK NOISE CLIPPER
VIDEO AMP
PHASE SHIFT
AFC
VIDEO DET.
VIDEO AMP
IC701 BN5115
R715 390
C716 0.01
C714 22P
C715 0.01
R735 2.7K
C727 22P
TP704
TP705
TP706
TP703
R716 560
C711 3P
C712 3P
DET ADJ
T703 EIV7E016F
T702 EIM7A511
AUDIO TRAP
C713 120P (P)
C717 15P
C718 56P (R)
T704 EIV7E016E
L703 15μ
X703 EFCS5R5MW3 VLF0182
R719 560
L701 22μ
C733 150P
IC751 AN5215
SIF LIMITER AMP
FM DET.
C754 16V100
C755 39P
C753 0.047
C756 12P
C759 16V10
L707 10μ
R754 680
C761 0.01
T751 EIS7E006A
R752 22 1/4W
SIF DET
T752 EIS7E006B
X702 EFCS5R5MS4 VLF0178
C758 82P (P)
C751 5P
C737 16V22
L704 47μ
C719 50V1
C739 0.01
R728 10KB
L705 56μ
HIGH PEAKER
C724 15P
TP707
R725 47
Q701 2SD636 2SC1684 (NOISE CAN.)
R723 5600
R722 18K
C723 25V4.7
R724 820 ±2%
Q702 2SA564 2SB641 (VIDEO AMP)
R734 3300
R727 1K ±2%
C730 39P
C726 68P
L706 82μ
R731 68
R726 68
Q703 2SD636(S.T) 2SD637(S.T)
(VIDEO AMP)
R732 1K
C746 16V22
Q7006 2SC1684 2SD636
(AUDIO DEF Ⓗ : ON)
R7014 1K
R7015 10K
D703 MA165
SOUND DEF
R791 1K
C791 0.027
TP710
TP711
R755 20KB
R756 1K
TP708
C757 560P
D705 10E1 or ERB12010
R733 27
R790 75
C721 16V47
P704
1 BT P7501 - 1
2 BV P7501 - 2
3 BS P7501 - 3
4 GND P7501 - 4
5 BU P7501 - 5
6 +12.0V Ⓑ P7501 - 6
7 AFC DEF P7501 - 7
8 AUDIO DEF P7501 - 8
9 GND P7501 - 9
10 12.0V Ⓕ P7501 - 10
P701
1 VIDEO BP701 - 1
2 GND BP701 - 2
3 AUDIO BP701 - 3
4 GND BP701 - 4
5 +12.0V Ⓑ BP701 - 5
6
7
P702
1 12.0 Ⓕ BP702 - 1
2 GND BP702 - 2
BP703
1
2 +12V Ⓕ
3 GND
VEP07186G
1 BS
2 +12V
3 GND
1 GND
2 AUDIO
3 GND
4 VIDEO
ANTENNA /RF CONVERTER ENC87751
RF IN
RF OUT
VTR

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

Back Page:
OPERATION Section

3-25. TV DEMODULATOR CIRCUIT BOARD (VEP07186G: NV-850E)


TNV77759F2
U.AGC
V.AGC
U.AGC BU V.AGC BS BV BT AFC BM IF
R702 2KB
R705 2KB
R701 2200
D702 D701
R706 2200
MA165 × 2
R703 4700
R704 3900
TP708
C701 16V22
C702 16V10
C732 0.01
TP701
R712 18K
C703 0.01
R740 10K
C704 16V33
C731 0.01
C705 50V0.68
R707 39K
C734 0.01
TP702
R738 560
R708 47K
C706 16V33
C743 0.01
VJB07186
P702
BP703
P704
C746 16V22
D703 MA165
IF FILTER
T701 EULHLB333
R717 1K
R714 1K
R713 3900
C720 0.01
C710 0.01
C707 0.01
C708 0.01
C716 0.01
IC701 BN5115
Q701 2SD636 (Q.R.S.T) 2SC1684 (Q.R.S.T)
R722 18K
R723 5600
R725 47
C723 2.5V4.7
L706 82μ
C726 68P
C730 39P
R734 3300
TP707
Q702 2SB641 (Q.R.S.T) 2SA564 (Q.R.S.T)
L704 47μ
C719 50V1
C739 0.01
L705 56μ
HIGH PEAKER
R728 10KB
TP709
C709 0.22
R711 270K
R727 1K ±2%
R724 820 ±2%
C724 15P
R726 68
R715 390
R716 560
C712 3P
C714 22P
C727 22P
R735 2700
X703 EFCS 5R5MW3 VLF0182
T703 EIV-7E016F
DET ADJ
TP703
TP704
TP705
L703 15μ
Q703 2SD636 (S.T) 2SD637 (S.T)
R731 68
C711 3P
C715 0.01
C713 120P
T702 EIM7A511
C717 15P
C718 56P
T704 EIV-7E016E
AFC ADJ
TP706
L701 22μ
C733 150P
R719 560
R732 1K
R733 27
C737 16V22
D705 10E1 or ERB1201G1
R790 75
C756 12P
R754 680
SOUND DEF
R755 20KB
R791 1000
C759 16V10
C791 0.027
R756 1K
L707 10m
T752 EIS-7E006B
C755 39P
T751 EIS-7E006A
IC751 AN5215
C761 0.01
C753 0.047
C754 16V100
C758 82P
X702 EFCS 5R5MS4 VLF0178
C751 5P
R752 1/4W 22
C757 560P
TP710
R7014 1K
R7015 10K
Q7006 2SD636 (Q.R.S.T) 2SC1684 (Q.R.S.T)
TP711
C721 16V47
P701

P702

1	12.0V Ⓕ
2	GND

BP703

1	————
2	+12V Ⓕ
3	GND

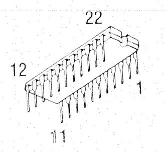
P704

1	BT
2	BV
3	BS
4	GND
5	BU
6	+12.0V Ⓑ
7	AFC. DEF
8	AUDIO DEF
9	GND
10	12.7V

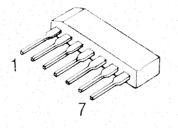
P701

1	VIDEO
2	GND
3	AUDIO
4	GND
5	+ 12.0V Ⓑ
6	————
7	————

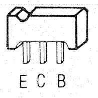
ICs & TRANSISTORs INFORMATION



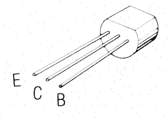
BN5115



AN5215

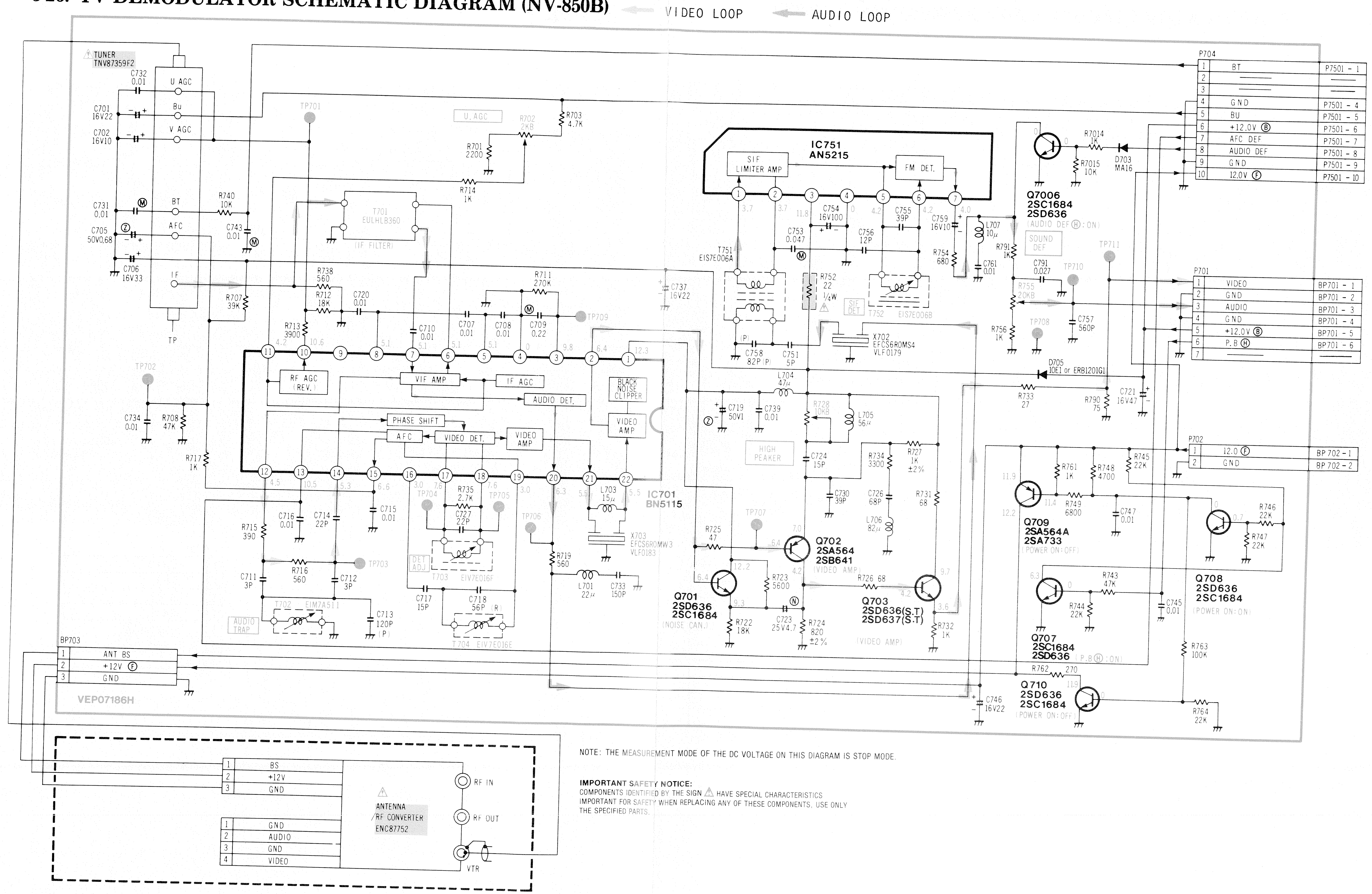


2SD636
2SB641



2SA564A

3-26. TV DEMODULATOR SCHEMATIC DIAGRAM (NV-850B)

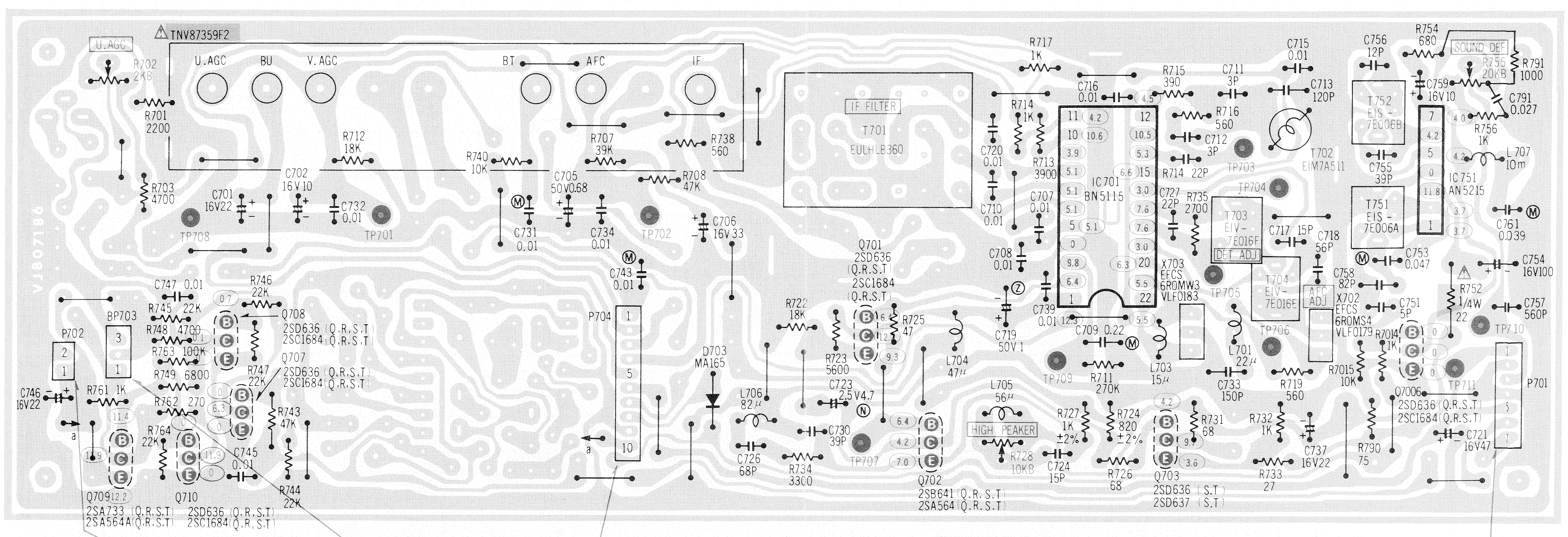

VIDEO LOOP
AUDIO LOOP
TUNER TNV87359F2
U AGC
Bu
V AGC
BT
AFC
IF
TP
C732 0.01
C701 16V22
C702 16V10
C731 0.01
C705 50V0.68
C706 16V33
R740 10K
C743 0.01
R707 39K
TP701
TP702
C734 0.01
R708 47K
R717 1K
U.AGC
R702 2KB
R703 4.7K
R701 2200
R714 1K
T701 EULHLB360
(IF FILTER)
R738 560
R712 18K
C720 0.01
R713 3900
R711 270K
C710 0.01
C707 0.01
C708 0.01
C709 0.22
TP709
C737 16V22
RF AGC (REV.)
VIF AMP
IF AGC
AUDIO DET.
BLACK NOISE CLIPPER
VIDEO AMP
PHASE SHIFT
AFC
VIDEO DET.
VIDEO AMP
IC701 BN5115
C716 0.01
C714 22P
C715 0.01
R715 390
R716 560
C711 3P
C712 3P
TP703
TP704
TP705
TP706
R735 2.7K
C727 22P
DET ADJ
T703 EIV7E016F
C717 15P
C718 56P (R)
T704 EIV7E016E
T702 EIM7A511
AUDIO TRAP
C713 120P (P)
L703 15μ
X703 EFCS6R0MW3 VLF0183
R719 560
L701 22μ
C733 150P
IC751 AN5215
SIF LIMITER AMP
FM DET.
C754 16V100
C753 0.047
C755 39P
C756 12P
C759 16V10
L707 10μ
R754 680
C761 0.01
R791 1K
T751 EIS7E006A
R752 22 1/4W
SIF DET
T752 EIS7E006B
X702 EFCS6R0MS4 VLF0179
C758 82P (P)
C751 5P
L704 47μ
C719 50V1
C739 0.01
R728 10KB
L705 56μ
HIGH PEAKER
C724 15P
C730 39P
R734 3300
R727 1K ±2%
C726 68P
L706 82μ
R731 68
TP707
R725 47
Q702 2SA564 2SB641 (VIDEO AMP)
Q701 2SD636 2SC1684 (NOISE CAN.)
R723 5600
R722 18K
C723 25V4.7
R724 820 ±2%
R726 68
Q703 2SD636(S.T) 2SD637(S.T) (VIDEO AMP)
R732 1K
Q7006 2SC1684 2SD636 (AUDIO DEF (H): ON)
R7014 1K
R7015 10K
D703 MA16
SOUND DEF
C791 0.027
TP710
TP711
R755 20KB
R756 1K
TP708
C757 560P
D705 10E1 or ERB1201G1
R733 27
R790 75
C721 16V47
P704
BT
GND
BU
+12.0V (B)
AFC DEF
AUDIO DEF
GND
12.0V (F)
P7501 - 1
P7501 - 4
P7501 - 5
P7501 - 6
P7501 - 7
P7501 - 8
P7501 - 9
P7501 - 10
P701
VIDEO
GND
AUDIO
GND
+12.0V (B)
P.8 (H)
BP701 - 1
BP701 - 2
BP701 - 3
BP701 - 4
BP701 - 5
BP701 - 6
P702
12.0 (F)
GND
BP 702 - 1
BP 702 - 2
R761 1K
R748 4700
R745 22K
R749 6800
C747 0.01
Q709 2SA564A 2SA733 (POWER ON: OFF)
R746 22K
R747 22K
Q708 2SD636 2SC1684 (POWER ON: ON)
R743 47K
R744 22K
C745 0.01
Q707 2SC1684 2SD636 (P.8 (H): ON)
R763 100K
R762 270
Q710 2SD636 2SC1684 (POWER ON: OFF)
C746 16V22
R764 22K
BP703
ANT BS
+12V (F)
GND
VEP07186H
BS
+12V
GND
GND
AUDIO
GND
VIDEO
ANTENNA /RF CONVERTER ENC87752
RF IN
RF OUT
VTR

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

Back Page:
TV DEMODULATOR Section

3-27. TV DEMODULATOR CIRCUIT BOARD (VEP07186H: NV-850B)


TNV87359F2
U.AGC
R702 2KB
U.AGC
BU
V.AGC
BT
AFC
IF
R701 2200
R703 4700
C701 16V22
C702 16V10
C732 0.01
R712 18K
R740 10K
R707 39K
R738 560
R708 47K
C705 50V0.68
C731 0.01
C734 0.01
C706 16V33
C743 0.01
TP708
TP701
TP702
VJB07186
C747 0.01
R746 22K
R745 22K
R748 4700
R763 100K
R749 6800
R762 270
R761 1K
R764 22K
R747 22K
R743 47K
R744 22K
C745 0.01
C746 16V22
BP703
P702
P704
Q708 2SD636 (Q.R.S.T) 2SC1684 (Q.R.S.T)
Q707 2SD636 (Q.R.S.T) 2SC1684 (Q.R.S.T)
Q709 2SA733 (Q.R.S.T) 2SA564A (Q.R.S.T)
Q710 2SD636 (Q.R.S.T) 2SC1684 (Q.R.S.T)
D703 MA165
IF FILTER
T701 EULHLB360
R722 18K
R723 5600
R725 47
Q701 2SD636 (Q.R.S.T) 2SC1684 (Q.R.S.T)
C723 2.5V4.7
L706 82μ
C726 68P
C730 39P
R734 3300
TP707
Q702 2SB641 (Q.R.S.T) 2SA564 (Q.R.S.T)
L704 47μ
R717 1K
R714 1K
R713 3900
C716 0.01
C720 0.01
C710 0.01
C707 0.01
C708 0.01
C719 50V1
C739 0.01
IC701 BN5115
C709 0.22
R711 270K
TP709
L705 56μ
HIGH PEAKER
R727 1K ±2%
R728 10KB
C724 15P
R724 820 ±2%
R726 68
Q703 2SD636 (S.T) 2SD637 (S.T)
R731 68
L703 15μ
R715 390
R716 560
C711 3P
C712 3P
R714 22P
C727 22P
R735 2700
X703 EFCS 6R0MW3 VLF0183
TP705
TP703
TP704
T703 EIV-7E016F
DET ADJ
C715 0.01
C713 120P
T702 EIM7A511
C717 15P
C718 56P
T704 EIV-7E016E
AFC ADJ
TP706
L701 22μ
C733 150P
R719 560
R732 1K
C737 16V22
R733 27
C756 12P
R754 680
SOUND DEF
R756 20KB
R791 1000
C759 16V10
C791 0.027
R756 1K
L707 10m
T752 EIS-7E006B
C755 39P
T751 EIS-7E006A
IC751 AN5215
C761 0.039
C753 0.047
C754 16V100
C758 82P
X702 EFCS 6R0MS4 VLF0179
C751 5P
R752 1/4W 22
C757 560P
TP710
R7014 1K
R7015 10K
Q7006 2SD636 (Q.R.S.T) 2SC1684 (Q.R.S.T)
C721 16V47
R790 75
TP711
P701

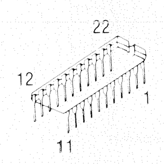
	P702
1	12.0V Ⓕ
2	GND

	BP703
1	ANT BS
2	+12V Ⓕ
3	GND

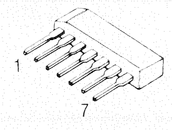
	P704
1	BT
2	——
3	——
4	GND
5	BU
6	+12.0V Ⓑ
7	AFC.DEF
8	AUDIO DEF
9	GND
10	12.7V

	P701
1	VIDEO
2	GND
3	AUDIO
4	GND
5	+12.0V Ⓑ
6	P.B Ⓗ
7	ANT.BS

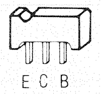
ICs & TRANSISTORs INFORMATION



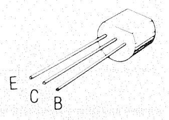
BN5115



AN5215

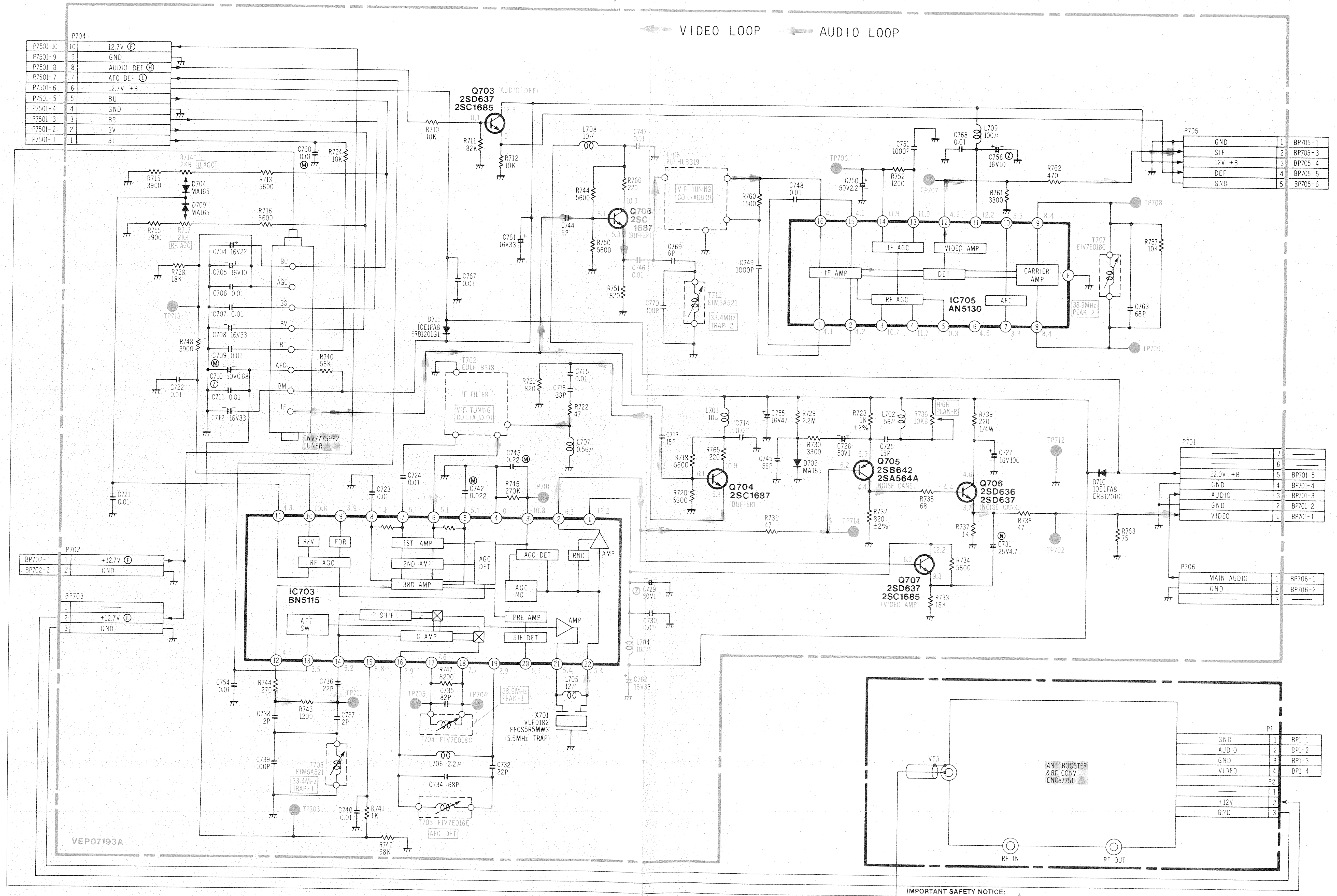


2SD636
2SB641



2SA564A

3-28. TV DEMODULATOR SCHEMATIC DIAGRAM (NV-850EG)


VIDEO LOOP
AUDIO LOOP
P704
P7501-10 10 12.7V Ⓕ
P7501-9 9 GND
P7501-8 8 AUDIO DEF Ⓗ
P7501-7 7 AFC DEF Ⓛ
P7501-6 6 12.7V +B
P7501-5 5 BU
P7501-4 4 GND
P7501-3 3 BS
P7501-2 2 BV
P7501-1 1 BT
Q703 (AUDIO DEF)
2SD637
2SC1685
R710 10K
R711 82K
R712 10K
C760 0.01
R724 10K
R714 2K8 (U.AGC)
R715 3900
D704 MA165
D709 MA165
R713 5600
R716 5600
R755 3900
R717 2K8 (RF AGC)
R728 18K
TP713
R748 3900
C722 0.01
C704 16V22
C705 16V10
C706 0.01
C707 0.01
C708 16V33
C709 0.01
C710 50V0.68
C711 0.01
C712 16V33
BU
AGC
BS
BV
BT
AFC
BM
IF
R740 56K
TNV77759F2 TUNER ⚠
C721 0.01
P702
BP702-1 1 +12.7V Ⓕ
BP702-2 2 GND
BP703
1
2 +12.7V Ⓕ
3 GND
VEP07193A
L708 10μ
C747 0.01
T706 EULHLB319
VIF TUNING COIL (AUDIO)
R744 5600
R766 220
Q708 2SC1687 (BUFFER)
C761 16V33
C744 5P
R750 5600
C769 6P
C746 0.01
R751 820
C770 100P
T712 EIM5A521 33.4MHz TRAP-2
C767 0.01
D711 10E1FA8 ERB12O1G1
T702 EULHLB318
IF FILTER
VIF TUNING COIL (AUDIO)
R721 820
C716 33P
C715 0.01
R722 47
L707 0.56μ
C743 0.22 Ⓜ
C742 0.022
R745 270K
TP701
C724 0.01
C723 0.01
IC703 BN5115
REV
FOR
RF AGC
1ST AMP
2ND AMP
3RD AMP
AGC DET
AGC DET
BNC
AMP
AGC NC
AFT SW
P SHIFT
C AMP
PRE AMP
SIF DET
AMP
C754 0.01
R744 270
C736 22P
TP711
R743 1200
C738 2P
C737 2P
C739 100P
T703 EIM5A521 33.4MHz TRAP-1
TP703
C740 0.01
R741 1K
R742 68K
TP705
R747 8200
C735 82P
TP704
38.9MHz PEAK-1
T704 EIV7E018C
L706 2.2μ
C732 22P
C734 68P
T705 EIV7E016E (AFC DET)
L705 12μ
X701 VLF0182 EFCS5R5MW3 (5.5MHz TRAP)
C729 50V1
C730 0.01
L704 100μ
C762 16V33
TP706
C751 1000P
C768 0.01
L709 100μ
C756 16V10
C750 50V2.2
R752 1200
TP707
R760 1500
C748 0.01
C749 1000P
R761 3300
R762 470
IF AGC
VIDEO AMP
IF AMP
DET
CARRIER AMP
RF AGC
IC705 AN5130
AFC
TP708
T707 EIV7E018C
R757 10K
38.9MHz PEAK-2
C763 68P
TP709
P705
GND 1 BP705-1
SIF 2 BP705-3
12V +B 3 BP705-4
DEF 4 BP705-5
GND 5 BP705-6
L701 10μ
C713 15P
C755 16V47
C714 0.01
R729 2.2M
R723 1K ±2%
L702 56μ
R736 10K B
HIGH PEAKER
R739 220 1/4W
R718 5600
R765 220
C745 56P
R730 3300
D702 MA165
C726 50V1
C725 15P
C727 16V100
TP712
Q704 2SC1687 (BUFFER)
R720 5600
Q705 2SB642 2SA564A (NOISE CANS.)
Q706 2SD636 2SD637 (NOISE CANS.)
R735 68
R731 47
TP714
R732 820 ±2%
R737 1K
R738 47
C731 25V4.7
TP702
R763 75
Q707 2SD637 2SC1685 (VIDEO AMP)
R734 5600
R733 18K
D710 10E1FA8 ERB12O1G1
P701
7
6
12.0V +B 5 BP701-5
GND 4 BP701-4
AUDIO 3 BP701-3
GND 2 BP701-2
VIDEO 1 BP701-1
P706
MAIN AUDIO 1 BP706-1
GND 2 BP706-2
3
P1
GND 1 BP1-1
AUDIO 2 BP1-2
GND 3 BP1-3
VIDEO 4 BP1-4
P2
1
+12V 2
GND 3
VTR
ANT BOOSTER & RF.CONV ENC87751 ⚠
RF IN
RF OUT

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

Back Page:
TV DEMODULATOR Section

3-29. TV DEMODULATOR CIRCUIT BOARD (VEP07193A: NV-850EG)

P702

1	+12.7V Ⓕ
2	GND

BP703

1	BS
2	+12V Ⓕ
3	GND

P704

1	BT
2	BV
3	BS
4	GND
5	BU
6	12.7V+B
7	AFC DEF
8	AUDIO DEF
9	GND
10	12.7V Ⓕ

P705

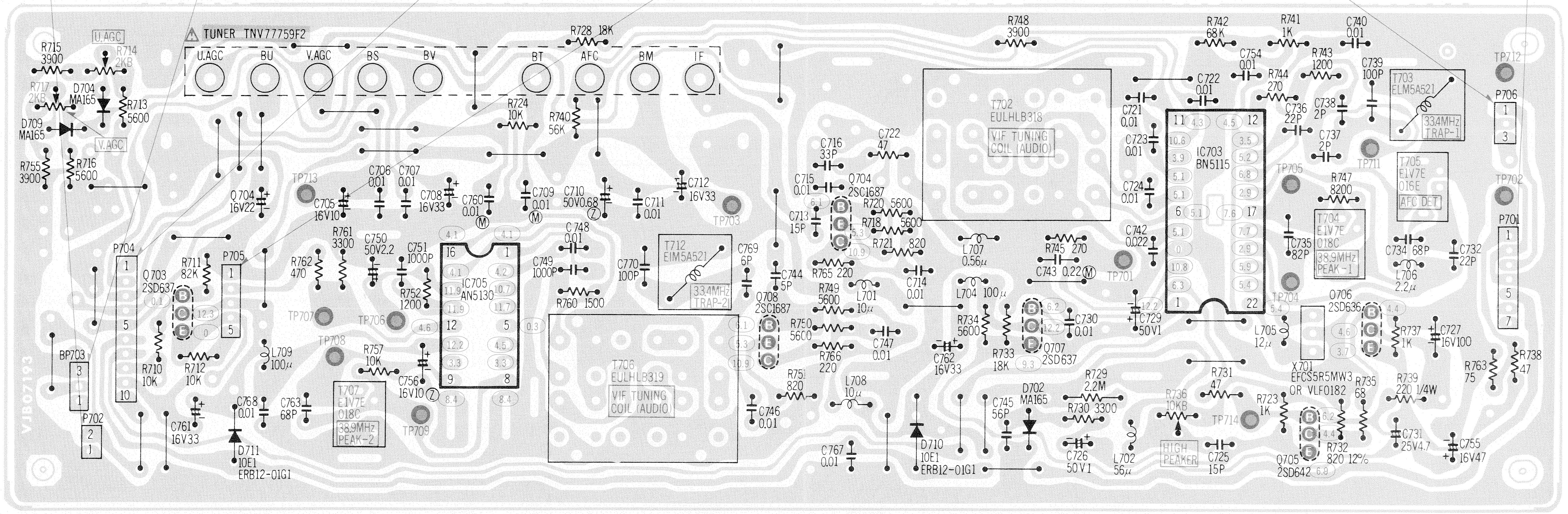
1	GND
2	SIF
3	12V+B
4	DEF
5	GND

P706

1	MAIN AUDIO
2	GND
3	———

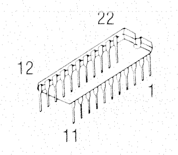
P701

1	VIDEO
2	GND
3	AUDIO
4	GND
5	12.7V +B
6	———
7	———

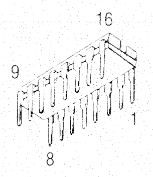


TUNER TNV77759F2
U.AGC
BU
V.AGC
BS
BV
BT
AFC
BM
IF
R715 3900
R714 2KB
R717 2KB
D704 MA165
R713 5600
D709 MA165
V.AGC
U.AGC
R755 3900
R716 5600
Q704 16V22
TP713
C706 0.01
C707 0.01
C705 16V10
C708 16V33
C760 0.01
C709 0.01
C710 50V0.68
C711 0.01
C712 16V33
TP703
R728 18K
R724 10K
R740 56K
P704
P705
Q703 2SD637
R711 82K
R761 3300
R762 470
C750 50V2.2
C751 1000P
R752 1200
IC705 AN5130
C748 0.01
C749 1000P
R760 1500
C770 100P
T712 EIM5A521
33.4MHz TRAP-2
C769 6P
C744 5P
BP703
R710 10K
R712 10K
L709 100µ
TP707
TP706
TP708
R757 10K
C756 16V10
C761 16V33
C768 0.01
C763 68P
T707 EIV7E 018C 38.9MHz PEAK-2
TP709
D711 10E1 ERB12-01G1
P702
T706 EULHLB319
VIF TUNING COIL (AUDIO)
Q708 2SC1687
C746 0.01
R751 820
R750 5600
R766 220
C716 33P
C722 47
C715 0.01
Q704 2SC1687
R720 5600
R718 5600
R721 820
C713 15P
R765 220
R749 5600
L701 10µ
C714 0.01
C747 0.01
C762 16V33
L708 10µ
C767 0.01
D710 10E1 ERB12-01G1
R748 3900
T702 EULHLB318
VIF TUNING COIL (AUDIO)
L707 0.56µ
L704 100µ
R745 270
C743 0.22
TP701
R734 5600
R733 18K
Q707 2SD637
C730 0.01
C729 50V1
D702 MA165
R729 2.2M
R730 3300
C745 56P
C726 50V1
L702 56µ
R742 68K
C754 0.01
C722 0.01
C721 0.01
C723 0.01
C724 0.01
C742 0.022
IC703 BN5115
R741 1K
R744 270
R743 1200
C740 0.01
C739 100P
C736 22P
C738 2P
C737 2P
T703 ELM5A521
33.4MHz TRAP-1
TP712
P706
TP711
TP705
R747 8200
T705 EIV7E 016E AFC DET
TP702
P701
T704 EIV7E 018C 38.9MHz PEAK-1
C735 82P
C734 68P
C732 22P
L706 2.2µ
TP704
Q706 2SD636
L705 12µ
R737 1K
C727 16V100
R763 75
R738 47
X701 EFCS5R5MW3 OR VLF0182
R735 68
R739 220 1/4W
R731 47
R736 10KB
R723 1K
TP714
HIGH PEAKER
C725 15P
Q705 2SD642
R732 820 12%
C731 25V4.7
C755 16V47
VJB07193

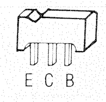
ICs & TRANSISTORs INFORMATION



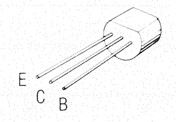
BN5115



AN5130

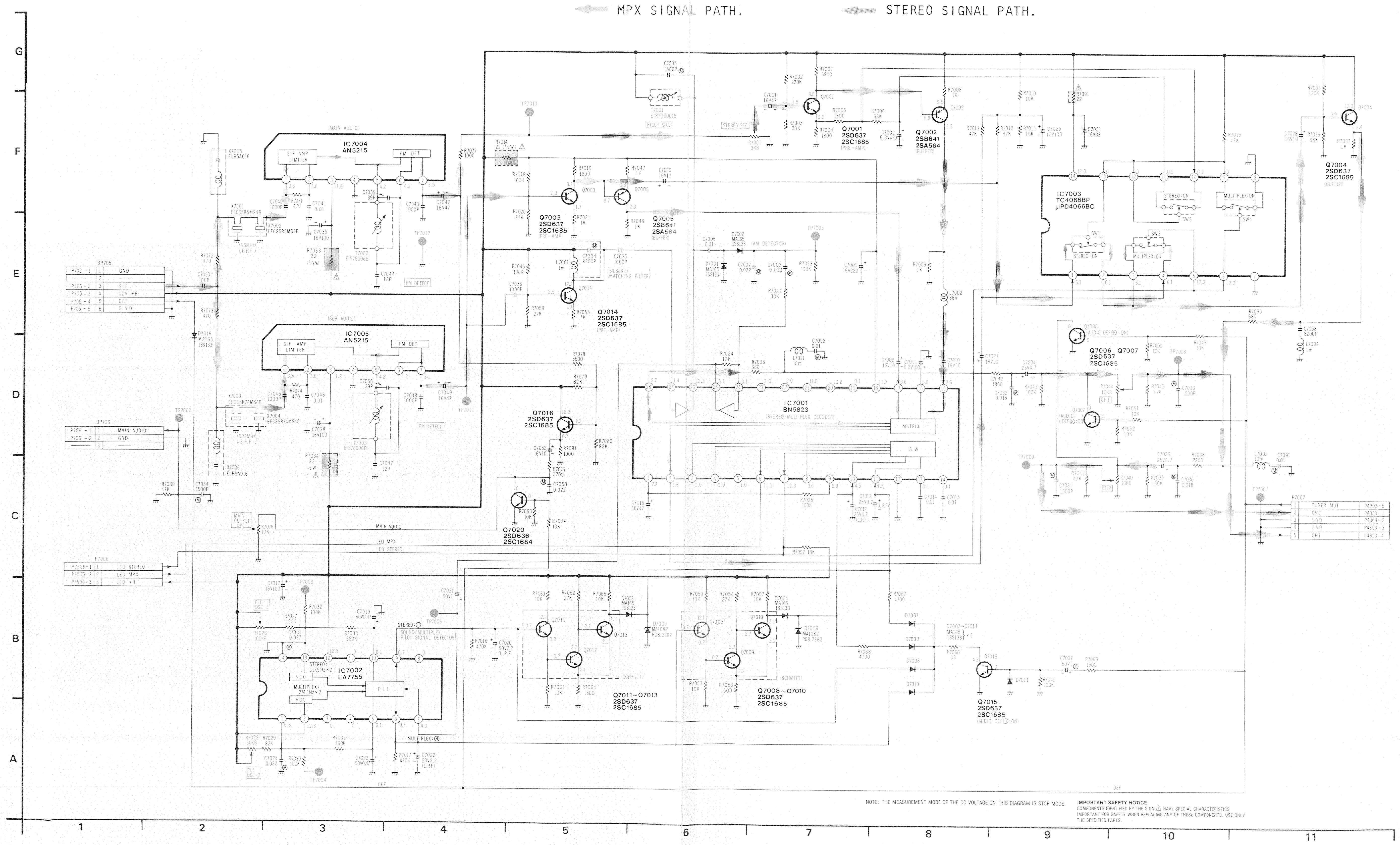


2SD637
2SB642
2SD636



2SC1687

3-30. DECODER SCHEMATIC DIAGRAM (NV-850EG)


MPX SIGNAL PATH.
STEREO SIGNAL PATH.
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
IC7004 AN5215
SIF AMP LIMITER
FM DET
(MAIN AUDIO)
IC7005 AN5215
(SUB AUDIO)
IC7001 BN5823
(STEREO/MULTIPLEX DECODER)
MATRIX
SW
IC7002 LA7755
VCO
PLL
STEREO 117.5Hz×2
MULTIPLEX 274.1Hz×2
IC7003 TC4066BP μPD4066BC
STEREO ON
MULTIPLEX ON
SW1
SW2
SW3
SW4
Q7001 2SD637 2SC1685 (PRE-AMP)
Q7002 2SB641 2SA564 (BUFFER)
Q7003 2SD637 2SC1685 (PRE-AMP)
Q7004 2SD637 2SC1685 (BUFFER)
Q7005 2SB641 2SA564 (BUFFER)
Q7006, Q7007 2SD637 2SC1685
Q7014 2SD637 2SC1685 (PRE-AMP)
Q7016 2SD637 2SC1685
Q7020 2SD636 2SC1684
Q7011~Q7013 2SD637 2SC1685
Q7008~Q7010 2SD637 2SC1685
Q7015 2SD637 2SC1685 (AUDIO DEF ON)
(SCHMITT)
(AM DETECTOR)
(MATCHING FILTER)
(PILOT SIG)
(SOUND/MULTIPLEX PILOT SIGNAL DETECTOR)
BP705
P705-1 GND
P705-3 SIF
P705-3 12V +B
P705-4 DEF
P705-5 GND
BP706
P706-1 MAIN AUDIO
P706-2 GND
P7006
P7506-1 LED STEREO
P7506-2 LED MPX
P7506-3 LED +B
P7007
TUNER MUT
CH2
GND
GND
CH1
P4303-5
P4303-3
P4303-2
P4303-3
P4303-1
MAIN AUDIO
LED MPX
LED STEREO
DEF
MAIN OUTPUT LEVEL
FM DETECT
TP7001
TP7002
TP7003
TP7004
TP7005
TP7006
TP7007
TP7008
TP7009
TP7011
TP7012
STEREO:Ⓐ
MULTIPLEX:Ⓑ
PLL OSC-1
PLL OSC-2

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SPECIFIED PARTS.

Back Page:
TV DEMODULATOR Section

3-31. DECODER CIRCUIT BOARD (VEP07194A: NV-850EG)

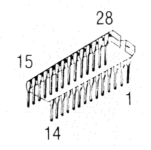
DECODER SCHEMATIC	
Transistor	
Q7001	F-7
Q7002	F-8
Q7003	F-5
Q7004	F-11
Q7005	F-6
Q7006	D-9
Q7007	D-9
Q7008	B-6
Q7009	B-6
Q7010	B-7
Q7011	B-5
Q7012	B-5
Q7013	B-5
Q7014	E-5
Q7015	B-8
Q7016	D-5
Q7020	C-5
Integrated Circuit	
IC7001	D-7
IC7002	B-3
IC7003	F-10
IC7004	F-3
IC7005	D-3
Test Point	
TP7002	D-2
TP7003	B-3
TP7004	A-3
TP7005	E-7
TP7006	B-4
TP7007	C-11
TP7008	D-10
TP7009	D-9
TP7011	D-4
TP7012	E-4
TP7013	F-5
Adjustment	
R7001	F-7
R7026	B-2
R7028	A-2
R7040	C-9
R7044	D-9
R7076	C-2
T7001	G-6
T7002	F-3
T7003	D-3
Connector	
BP705	E-1
BP706	D-1
P7006	C-1
P7007	C-11

ADDRESS INFORMATION

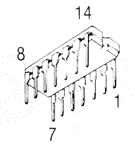
DECODER CIRCUIT BOARD	
Transistor	
Q7001	B-4
Q7002	A-4
Q7003	B-3
Q7004	B-4
Q7005	B-2
Q7006	A-4
Q7007	A-4
Q7008	A-6
Q7009	A-6
Q7010	B-6
Q7011	B-6
Q7012	B-6
Q7013	B-6
Q7014	B-2
Q7015	A-6
Q7016	B-3
Q7020	A-3
Integrated Circuit	
IC7001	B-2
IC7002	A-5
IC7003	B-3
IC7004	B-4
IC7005	B-5
Test Point	
TP7002	B-2
TP7003	A-5
TP7004	A-5
TP7005	A-2
TP7006	A-5
TP7007	A-4
TP7008	A-4
TP7009	A-4
TP7011	B-3
TP7012	B-5
TP7013	B-4
Adjustment	
R7001	B-4
R7026	A-5
R7028	A-5
R7040	A-4
R7044	A-4
R7076	B-2
T7001	B-2
T7002	B-4
T7003	B-5

ADDRESS INFORMATION

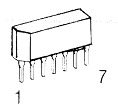
ICs & TRANSISTORs INFORMATION



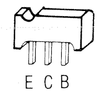
BN5823



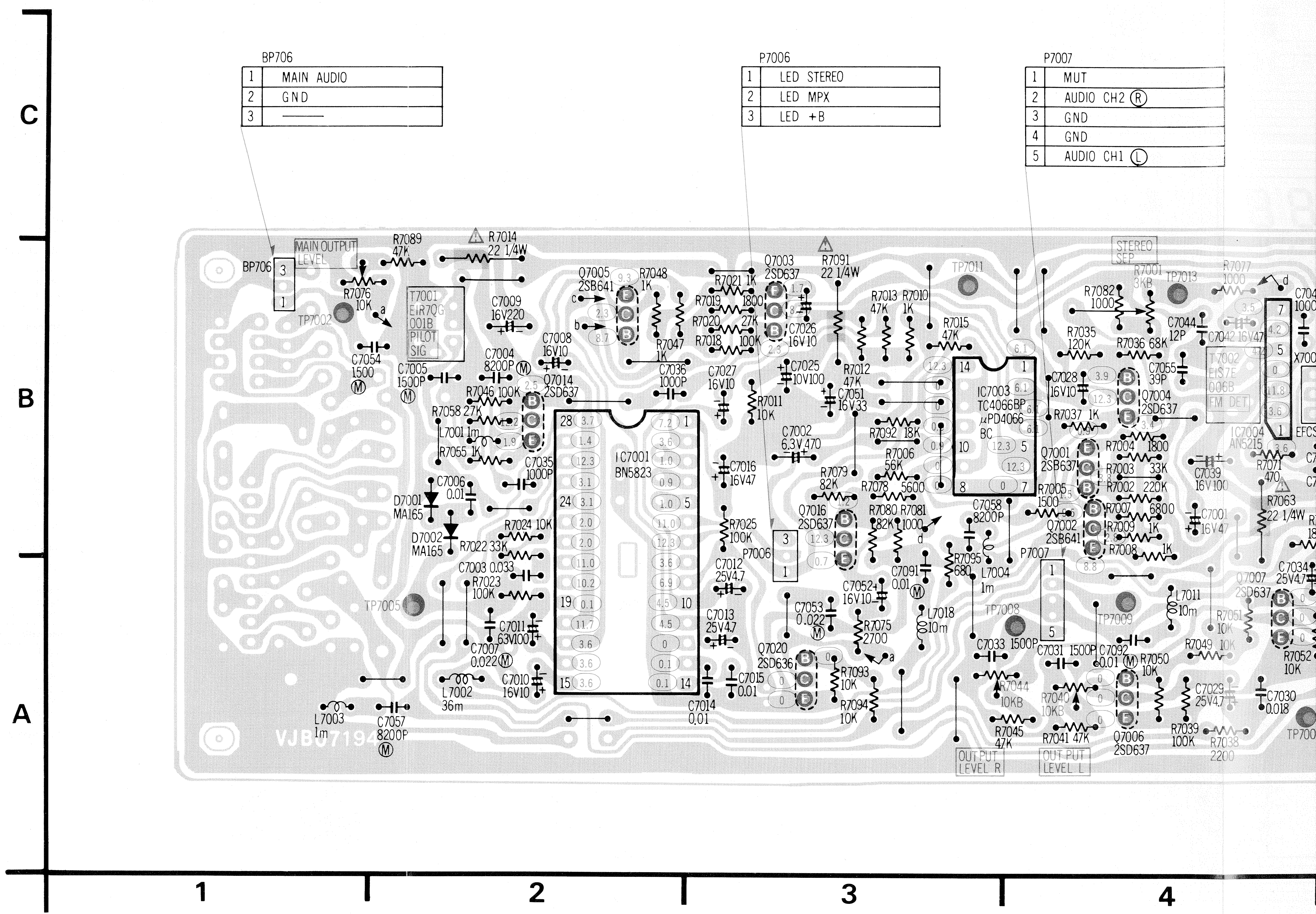
LA7755
TC4066BP



AN5215



2SD637
2SB641
2SD636


C
B
A
1
2
3
4
BP706
1 MAIN AUDIO
2 GND
3 ———
P7006
1 LED STEREO
2 LED MPX
3 LED +B
P7007
1 MUT
2 AUDIO CH2 Ⓡ
3 GND
4 GND
5 AUDIO CH1 Ⓛ
MAIN OUTPUT LEVEL
R7089 47K
R7014 22 1/4W
R7076 10K
T7001 EIR7G 001B PILOT SIG
TP7002
C7054 1500 Ⓜ
C7005 1500P Ⓜ
C7009 16V220
C7004 8200P Ⓜ
C7008 16V10
Q7005 2SB641
R7048 1K
Q7014 2SD637
R7046 100K
R7058 27K
L7001 1m
R7055 1K
C7035 1000P
C7006 0.01
D7001 MA165
D7002 MA165
R7024 10K
R7022 33K
C7003 0.033
R7023 100K
TP7005
C7011 63V100
C7007 0.022 Ⓜ
C7010 16V10
L7002 36m
L7003 1m
C7057 8200P Ⓜ
VJB07194
IC7001 BN5823
Q7003 2SD637
R7021 1K
R7019 1800
R7020 27K
R7018 100K
C7026 16V10
R7047 1K
C7036 1000P
C7027 16V10
R7011 10K
R7091 22 1/4W
C7025 10V100
R7012 47K
C7051 16V33
C7002 6.3V470
C7016 16V47
R7025 100K
P7006
C7012 25V4.7
C7013 25V4.7
C7014 0.01
C7015 0.01
Q7020 2SD636
R7093 10K
R7094 10K
C7053 0.022 Ⓜ
R7075 2700
C7052 16V10
R7079 82K
Q7016 2SD637
R7078 5600
R7080 82K
R7081 1000
R7092 18K
R7006 56K
R7013 47K
R7010 1K
R7015 47K
TP7011
C7091 0.01 Ⓜ
R7095 680
L7004 1m
L7018 10m
IC7003 TC4066BP μPD4066 BC
C7058 8200P
TP7008
C7033 1500P
R7044 10KB
R7045 47K
OUTPUT LEVEL R
OUTPUT LEVEL L
P7007
C7031 1500P
C7092 0.01 Ⓜ
R7040 10KB
R7041 47K
Q7006 2SD637
R7050 10K
R7039 100K
R7038 2200
STEREO SEP
R7001 3KB
TP7013
R7082 1000
R7035 120K
R7036 68K
C7028 16V10
Q7004 2SD637
C7055 39P
R7037 1K
Q7001 2SB637
R7004 1800
R7003 33K
R7002 220K
R7005 1500
Q7002 2SB641
R7007 6800
R7009 1K
R7008 1K
TP7009
C7044 12P
C7042 16V47
T7002 EIS7E 006B FM DET
IC7004 AN5215
R7077 1000
C7039 16V100
R7071 470
R7063 22 1/4W
C7001 16V47
L7011 10m
R7051 10K
R7049 10K
R7052 10K
Q7007 2SD637
C7034 25V4.7
C7029 25V4.7
C7030 0.018
TP7004

UIT BOARD (VEP07194A: NV-850EG)

BP706

1	MAIN AUDIO
2	GND
3	———

P7006

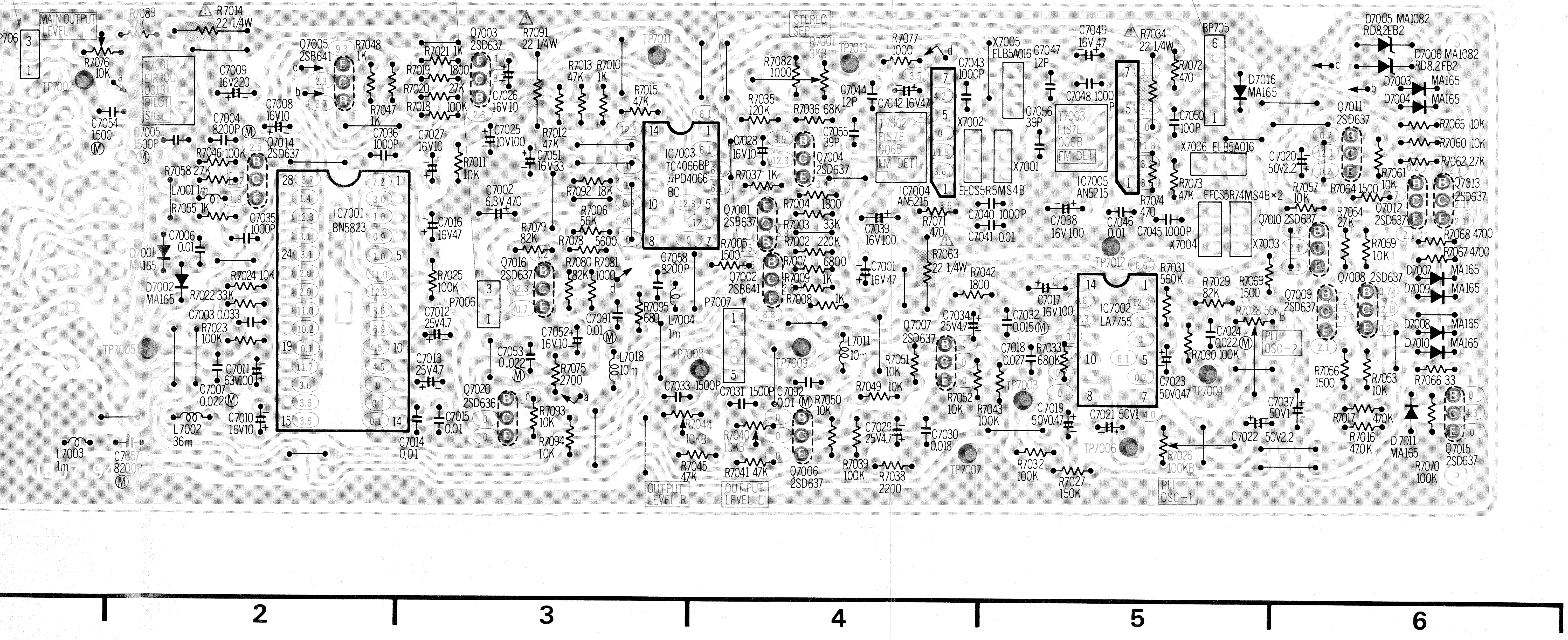
1	LED STEREO
2	LED MPX
3	LED +B

P7007

1	MUT
2	AUDIO CH2 Ⓡ
3	GND
4	GND
5	AUDIO CH1 Ⓛ

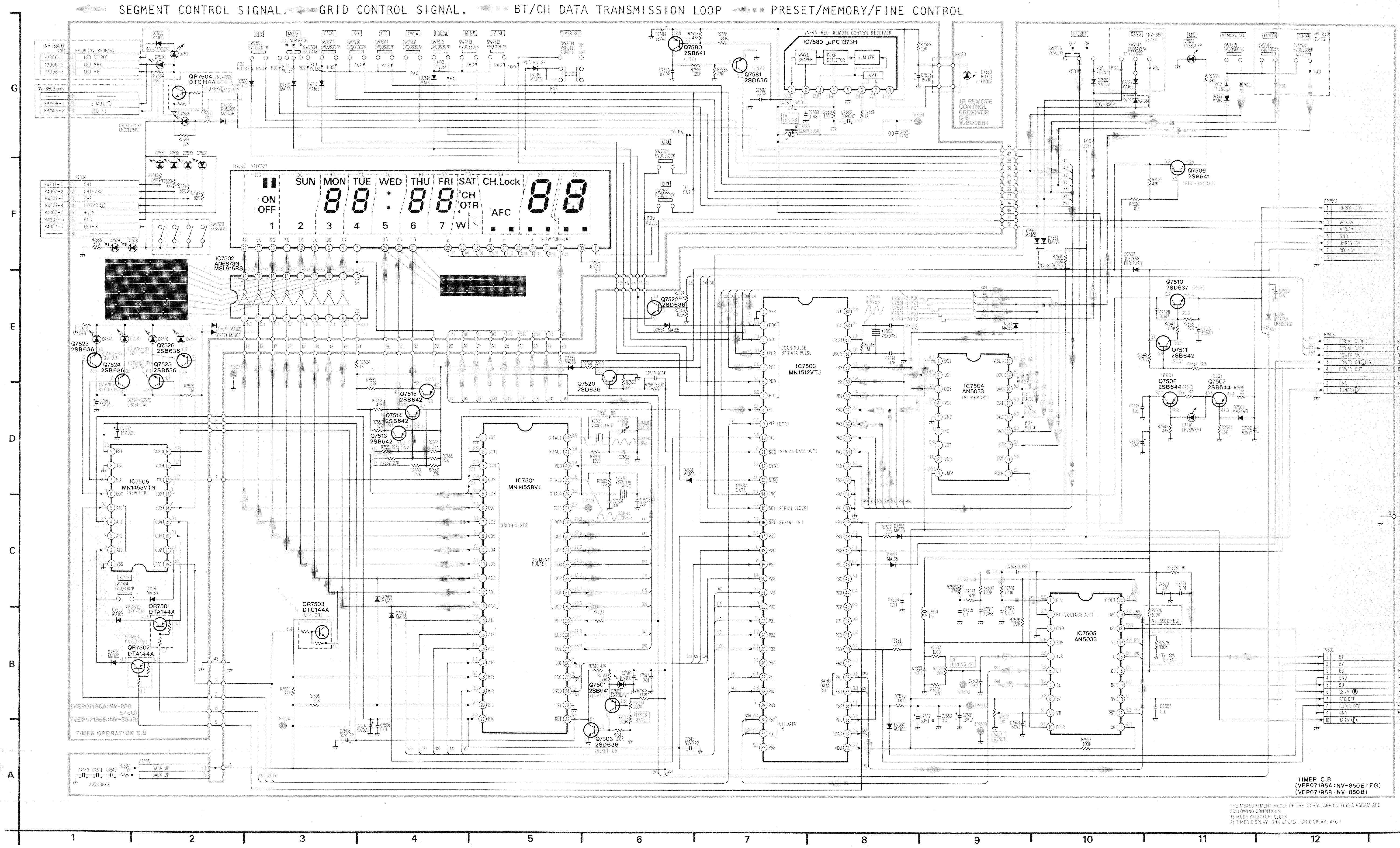
BP705

1	GND
2	———
3	SIF
4	12V+B
5	DEF
6	GND


BP706
MAIN OUTPUT LEVEL
R7089 47K
R7014 22 1/4W
R7076 10K
TP7002
T7001 EIR7QG 001B PILOT SIG
C7054 1500 Ⓜ
C7005 1500P Ⓜ
C7009 16V220
C7004 8200P Ⓜ
C7008 16V10
R7046 100K
Q7014 2SD637
R7058 27K
L7001 1m
R7055 1K
C7035 1000P
C7006 0.01
D7001 MA165
D7002 MA165
R7024 10K
R7022 33K
C7003 0.033
R7023 100K
TP7005
C7011 63V100
C7007 0.022 Ⓜ
C7010 16V10
L7002 36m
L7003 1m
C7057 8200P Ⓜ
VJBU7194
Q7005 2SB641
R7048 1K
R7047 1K
C7036 1000P
IC7001 BN5823
Q7003 2SD637
R7021 1K
R7019 1800
R7020 27K
R7018 100K
C7026 16V10
C7027 16V10
C7025 10V100
R7011 10K
C7002 6.3V 470
C7016 16V47
R7025 100K
C7012 25V4.7
P7006
Q7016 2SD637
C7013 25V4.7
Q7020 2SD636
C7015 0.01
C7014 0.01
C7053 0.022 Ⓜ
R7093 10K
R7094 10K
R7091 22 1/4W
R7013 47K
R7010 1K
R7012 47K
C7051 16V33
R7015 47K
R7092 18K
R7006 56K
R7079 82K
R7078 5600
R7080 82K
R7081 1000
C7052 16V10
C7091 0.01 Ⓜ
R7075 2700
L7018 10m
R7095 680
TP7011
IC7003 TC4066BP μPD4066 BC
C7058 8200P
L7004 1m
TP7008
C7033 1500P
R7044 10KB
R7045 47K
OUTPUT LEVEL R
P7007
C7031 1500P
C7092 0.01 Ⓜ
R7040 10KB
R7041 47K
OUTPUT LEVEL L
STEREO SEP
R7001 3KB
R7082 1000
R7035 120K
R7036 68K
C7028 16V10
R7037 1K
Q7001 2SB637
Q7002 2SB641
R7005 1500
R7004 1800
R7003 33K
R7002 220K
R7007 6800
R7009 1K
R7008 1K
Q7004 2SD637
C7055 39P
TP7013
TP7009
R7050 10K
Q7006 2SD637
R7039 100K
R7038 2200
L7011 10m
R7051 10K
R7049 10K
R7077 1000
C7044 12P
C7042 16V47
C7043 1000P
T7002 EIS7E 006B FM DET
IC7004 AN5215
R7071 470
R7063 22 1/4W
R7042 1800
C7039 16V100
C7001 16V47
Q7007 2SD637
C7034 25V4.7
C7029 25V4.7
C7030 0.018
TP7007
R7052 10K
R7043 100K
X7005 ELB5A016
X7002
X7001
C7047 12P
C7048 1000
C7056 39P
EFCS5R5MS4B
C7040 1000P
C7041 0.01
C7032 16V100
C7032 0.015 Ⓜ
C7018 0.027
R7033 680K
TP7003
C7019 50V0.47
R7032 100K
R7027 150K
TP7006
C7049 16V47
R7034 22 1/4W
T7003 EIS7E 006B FM DET
IC7005 AN5215
C7038 16V100
C7046 0.01
R7074 470
C7045 1000P
X7004
TP7012
C7017
IC7002 LA7755
C7021 50V1
R7026 100KB
PLL OSC-1
R7072 470
C7050 100P
R7073 47K
X7006 ELB5A016
EFCS5R74MS4B×2
X7003
R7031 560K
R7029 82K
R7069 1500
R7028 50K
C7024 0.022 Ⓜ
R7030 100K
PLL OSC-2
C7023 50V0.47
TP7004
C7022 50V2.2
C7037 50V1
BP705
D7016 MA165
C7020 50V2.2
R7057 10K
Q7010 2SD637
Q7011 2SD637
R7064 1500
R7054 27K
Q7009 2SD637
Q7008 2SD637
R7056 1500
R7053 10K
R7017 470K
R7016 470K
D7011 MA165
R7070 100K
D7005 MA1082 RD8.2EB2
D7006 MA1082 RD8.2EB2
D7003 MA165
D7004 MA165
R7065 10K
R7060 10K
R7062 27K
R7061 10K
Q7013 2SD637
Q7012 2SD637
R7068 4700
R7067 4700
R7059 10K
D7007 MA165
D7009 MA165
D7008 MA165
D7010 MA165
R7066 33
Q7015 2SD637
2
3
4
5
6

Next Page:
TIMER & TIMER OPERATION Section

3-32. TIMER & TIMER OPERATION SCHEMATIC DIAGRAM

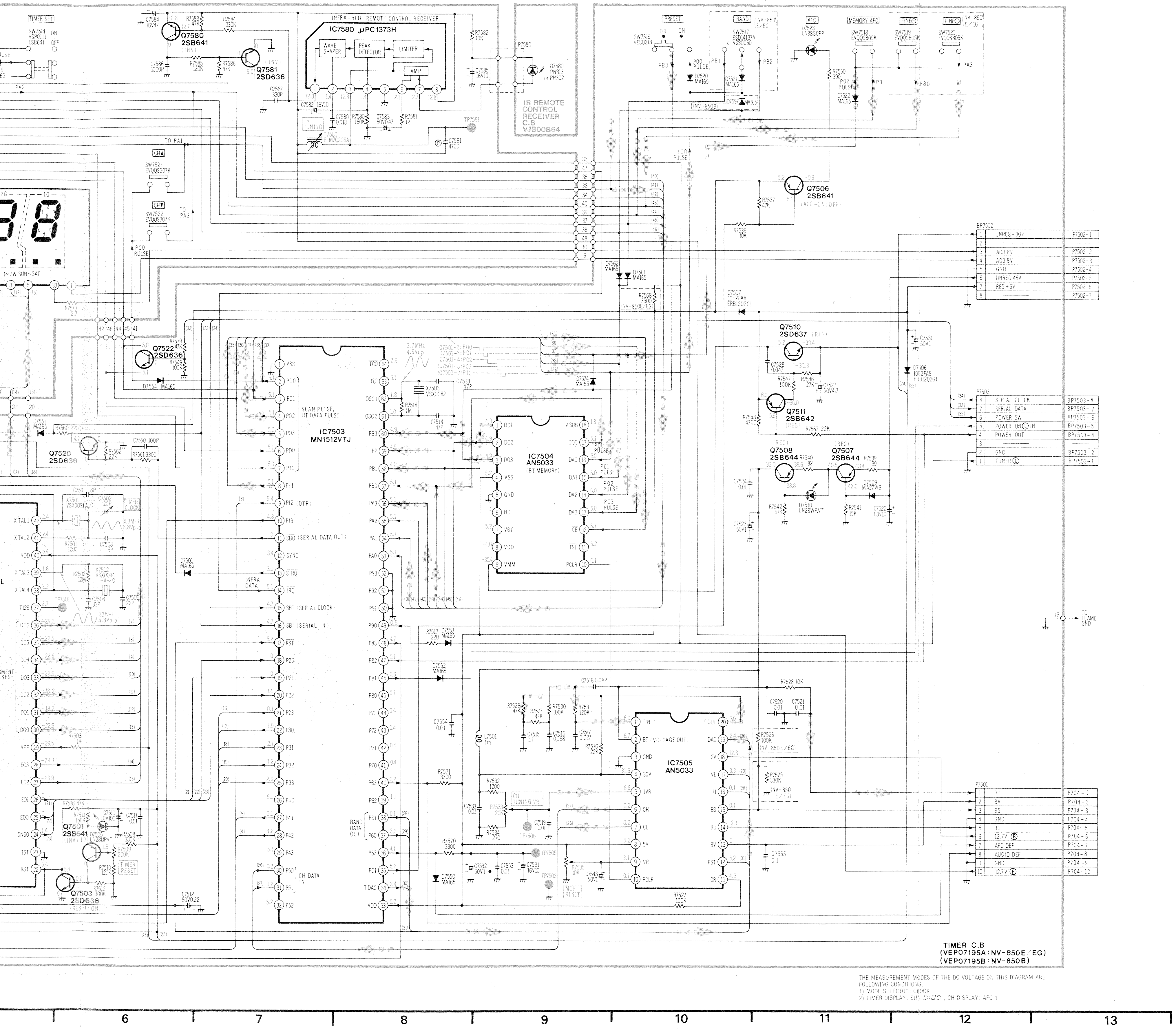

SEGMENT CONTROL SIGNAL.
GRID CONTROL SIGNAL.
BT/CH DATA TRANSMISSION LOOP
PRESET/MEMORY/FINE CONTROL
QR7504 DTC114A
INFRA-RED REMOTE CONTROL RECEIVER
IC7580 μPC1373H
WAVE SHAPER
PEAK DETECTOR
LIMITER
AMP
Q7580 2SB641
Q7581 2SD636
IR REMOTE CONTROL RECEIVER C.B VJB00B64
DP7501 VSL0027
SUN MON TUE WED THU FRI SAT CH.Lock
ON OFF
CH OTR
AFC
IC7502 AN6873N MSL915RS
Q7506 2SB641
Q7510 2SD637
Q7511 2SB642
Q7508 2SB644
Q7507 2SB644
Q7522 2SD636
Q7523 2SB636
Q7524 2SB636
Q7525 2SB636
Q7526 2SB636
Q7515 2SB642
Q7514 2SB642
Q7513 2SB642
Q7520 2SD636
IC7503 MN1512VTJ
SCAN PULSE BT DATA PULSE
IC7504 AN5033 (BT MEMORY)
IC7506 MN1453VTN (NEW OTR)
IC7501 MN1455BVL
GRID PULSES
SEGMENT PULSES
IC7505 AN5033
QR7501 DTA144A
QR7502 DTA144A
QR7503 DTC144A
Q7501 2SB641
Q7503 2SD636
TIMER OPERATION C.B
(VEP07196A:NV-850 E/EG)
(VEP07196B:NV-850B)
SERIAL CLOCK
SERIAL DATA
POWER SW
POWER ON
POWER OUT
GND
TUNER
UNREG -30V
AC3.8V
UNREG 45V
REG+6V
BT
BV
BS
BU
12.7V
AFC DEF
AUDIO DEF
BACK UP
1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G

TIMER C.B
(VEP07195A : NV-850E / EG)
(VEP07195B : NV-850B)

THE MEASUREMENT MODES OF THE DC VOLTAGE ON THIS DIAGRAM ARE FOLLOWING CONDITIONS.
1) MODE SELECTOR: CLOCK
2) TIMER DISPLAY: SUN 0:00 , CH DISPLAY: AFC 1

M

CH DATA TRANSMISSION LOOP ◄-- PRESET/MEMORY/FINE CONTROL


TIMER SET
IC7580 μPC1373H
INFRA-RED REMOTE CONTROL RECEIVER
WAVE SHAPER
PEAK DETECTOR
LIMITER
AMP
Q7580 2SB641
Q7581 2SD636
IR REMOTE CONTROL RECEIVER C.B VJB00B64
PRESET
BAND
AFC
MEMORY AFC
FINE
Q7506 2SB641
Q7522 2SD636
Q7520 2SD636
IC7503 MN1512VTJ
SCAN PULSE, BT DATA PULSE
IC7504 AN5033 (BT MEMORY)
Q7510 2SD637
Q7511 2SB642
Q7508 2SB644
Q7507 2SB644
BP7502
UNREG-30V
AC3.8V
GND
UNREG 45V
REG+6V
P7503
SERIAL CLOCK
SERIAL DATA
POWER SW
POWER ON
POWER OUT
GND
TUNER
INFRA DATA
BAND DATA OUT
CH DATA IN
IC7505 AN5033
Q7501 2SB641
Q7503 2SD636
P7501
BT
BV
BS
GND
BU
12.7V
AFC DEF
AUDIO DEF
GND
12.7V
TO FLAME GND
6
7
8
9
10
11
12
13

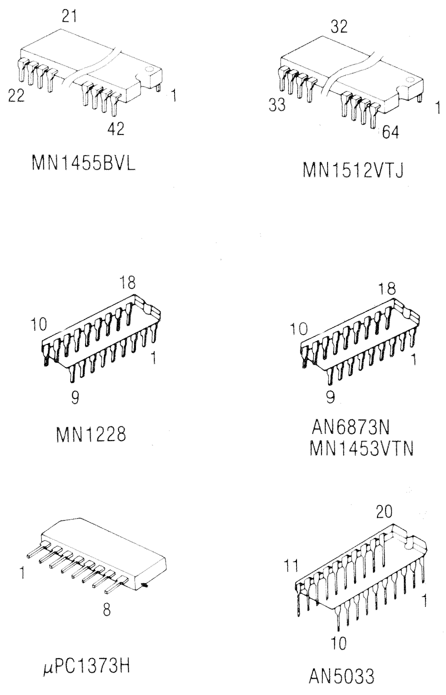
TIMER C.B
(VEP07195A: NV-850E/EG)
(VEP07195B: NV-850B)

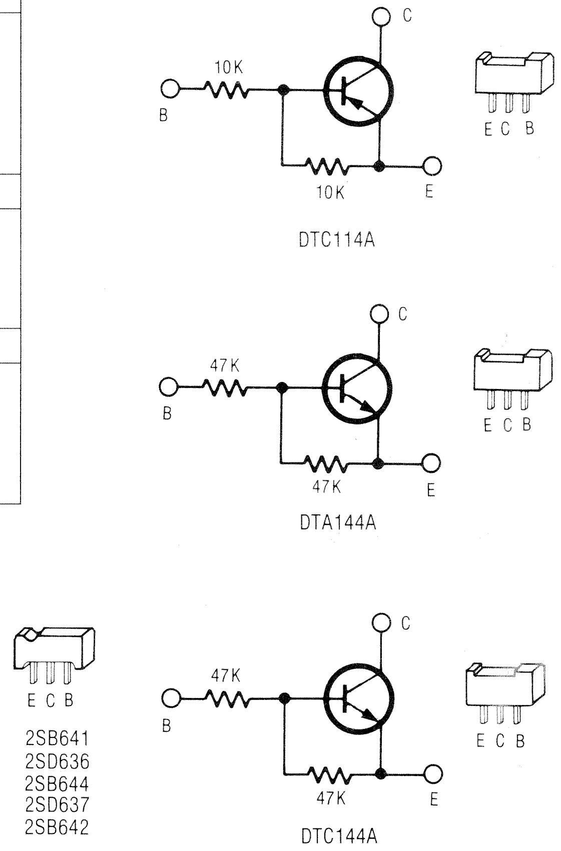
THE MEASUREMENT MODES OF THE DC VOLTAGE ON THIS DIAGRAM ARE FOLLOWING CONDITIONS.
1) MODE SELECTOR: CLOCK
2) TIMER DISPLAY: SUN 0:00, CH DISPLAY: AFC 1

TIMER & TIMER OPERATION SCHEMATIC	
Transistor	
Q7501	B-6
Q7503	B-6
Q7506	F-11
Q7507	D-11
Q7508	D-11
Q7510	E-11
Q7511	E-11
Q7513	D-4
Q7514	D-4
Q7515	D-4
Q7520	E-6
Q7522	E-6
Q7523	E-1
Q7524	D-1
Q7525	D-2
Q7526	E-2
Q7580	G-6
Q7581	G-7
Transistor & Resistor	
QR7501	B-2
QR7502	B-2
QR7503	B-3
QR7504	G-2 (E/EG)
Integrated Circuit	
IC7501	C-5
IC7502	E-3
IC7503	D-7
IC7504	D-9
IC7505	B-10
IC7506	C-2
IC7580	G-8
Test Point	
TP7501	C-6
TP7503	A-9
TP7504	A-3
TP7505	A-9
TP7506	B-9
TP7507	D-2
TP7581	G-9
Adjustment	
R7509	B-6
R7533	B-9
R7535	B-9
C7502	D-6
T7580	G-7
Connector	
P7501	B-12
P7503	E-12
P7504	F-1
P7505	A-2
P7506	G-1
BP7502	F-12

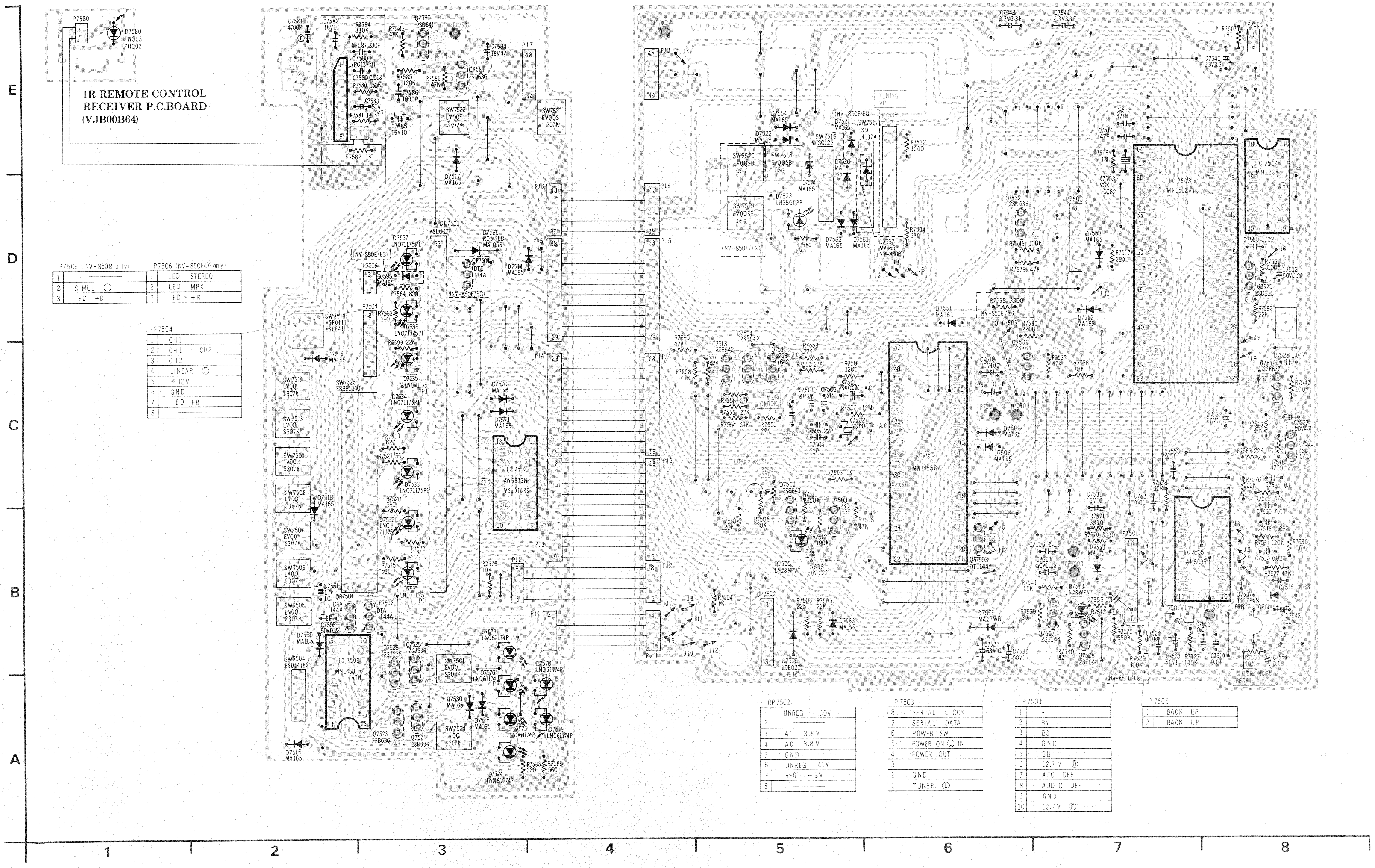
ADRESS INFORMATION

ICs & TRANSISTORs INFORMATION


21
22
1
42
MN1455BVL
32
33
1
64
MN1512VTJ
18
10
1
9
MN1228
18
10
1
9
AN6873N
MN1453VTN
1
8
μPC1373H
20
11
1
10
AN5033


C
10K
B
10K
E
E C B
DTC114A
C
47K
B
47K
E
E C B
DTA144A
E C B
2SB641
2SD636
2SB644
2SD637
2SB642
C
47K
B
47K
E
E C B
DTC144A

3-33. TIMER & TIMER OPERATION CIRCUIT BOARD (VEP07195A, VEP07196A: NV-850E/EG/VEP07195B, VEP07196B: NV-850B)


IR REMOTE CONTROL
RECEIVER P.C.BOARD
(VJB00B64)
VJB07196
VJB07195
P7580
D7580 PN313 PH302
T7580
IC7580 μPC1373H
IC7501 MN1455BVL
IC7502 AN6873N MSL915RS
IC7503 MN1512VTJ
IC7504 MN1228
IC7505 AN5033
IC7506 MN1453 VTN
TUNING VR
TIMER CLOCK
TIMER RESET
TIMER MCPU RESET
(NV-850E/EG)
(NV-850B)
PJ1
PJ2
PJ3
PJ4
PJ5
PJ6
PJ7
TP7501
TP7503
TP7504
TP7505
TP7506
TP7507
TP7581
E
D
C
B
A
1
2
3
4
5
6
7
8

P7506 (NV-850B only)

1	————
2	SIMUL Ⓛ
3	LED +B

P7506 (NV-850E/EG only)

1	LED STEREO
2	LED MPX
3	LED · +B

P7504

1	CH1
2	CH1 + CH2
3	CH2
4	LINEAR Ⓛ
5	+ 12V
6	GND
7	LED +B
8	————

BP7502

1	UNREG −30V
2	————
3	AC 3.8V
4	AC 3.8V
5	GND
6	UNREG 45V
7	REG +6V
8	————

P7503

8	SERIAL CLOCK
7	SERIAL DATA
6	POWER SW
5	POWER ON Ⓛ IN
4	POWER OUT
3	————
2	GND
1	TUNER Ⓛ

P7501

1	BT
2	BV
3	BS
4	GND
5	BU
6	12.7V Ⓑ
7	AFC DEF
8	AUDIO DEF
9	GND
10	12.7V Ⓕ

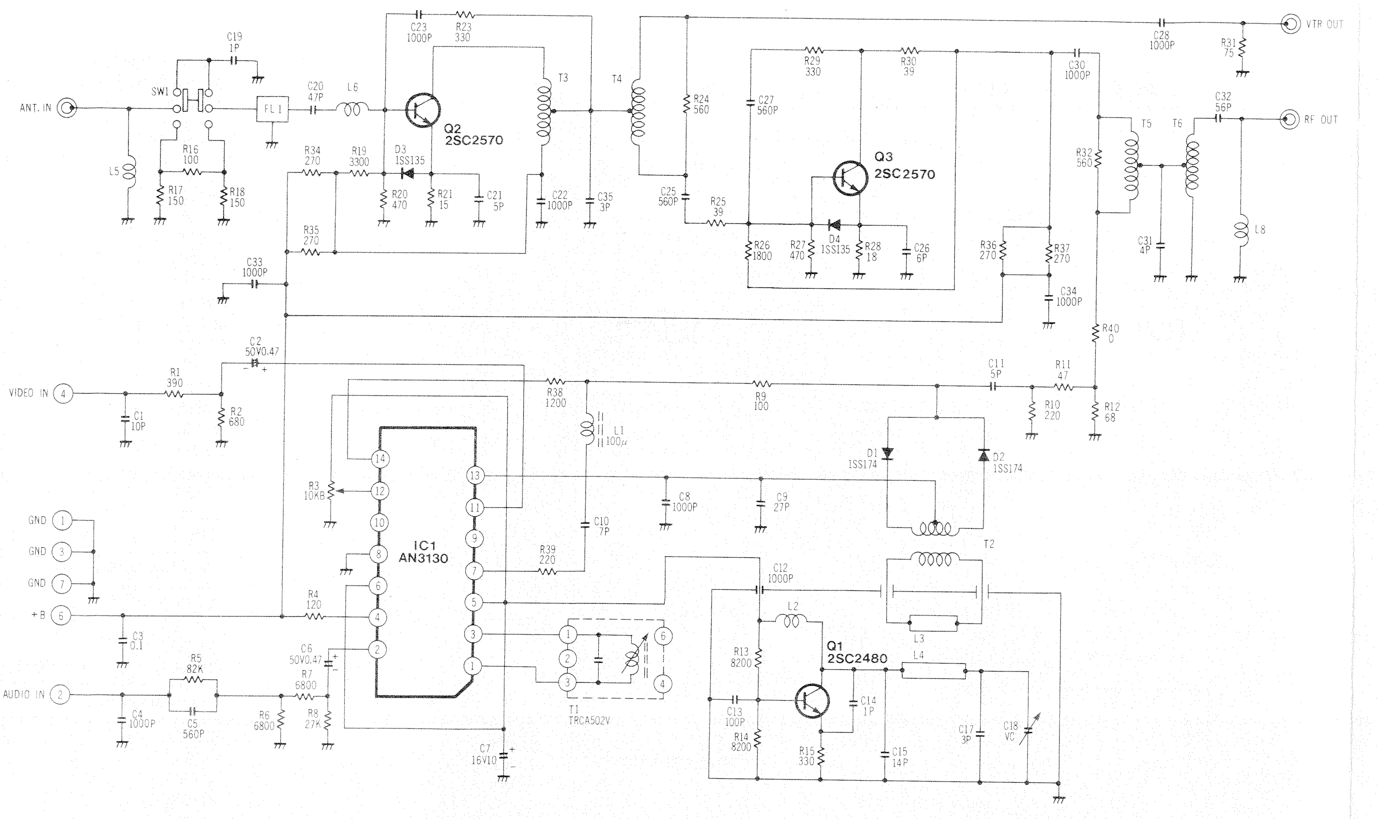
P7505

1	BACK UP
2	BACK UP

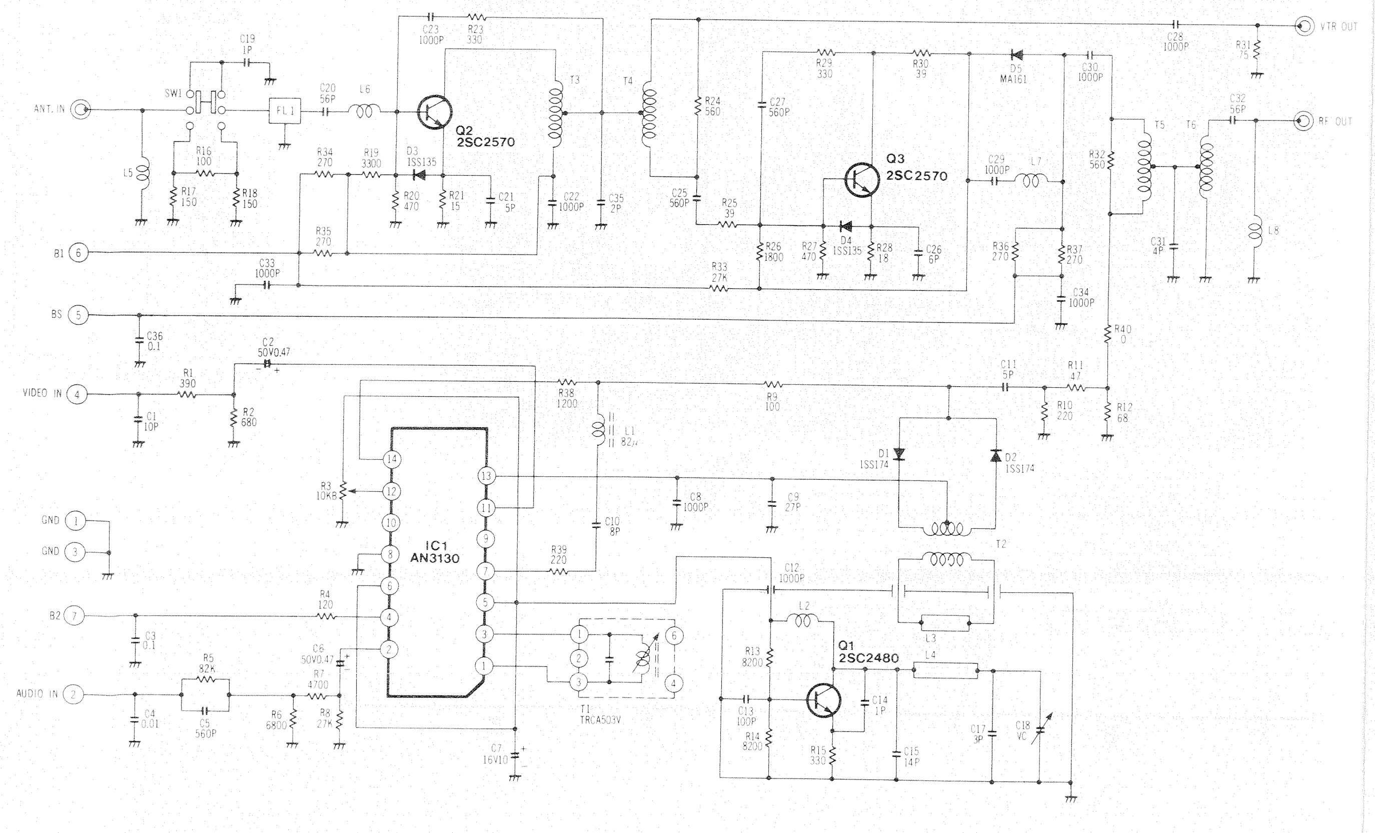
TIMER & TIMER OPERATION CIRCUIT BOARD	
Transistor	
Q7501	B-5
Q7503	B-5
Q7506	C-6
Q7507	B-7
Q7508	B-7
Q7510	C-8
Q7511	C-8
Q7513	C-5
Q7514	C-5
Q7515	C-5
Q7520	D-8
Q7522	D-6
Q7523	A-3
Q7524	A-3
Q7525	A-3
Q7526	A-3
Q7580	E-3
Q7581	E-3
Transistor & Resistor	
QR7501	B-2
QR7502	B-3
QR7503	B-6
QR7504	D-3 (E/EG)
Integrated Circuit	
IC7501	C-6
IC7502	C-3
IC7503	D-7
IC7504	D-8
IC7505	B-7
IC7506	A-2
IC7580	E-3
Test Point	
TP7501	C-6
TP7503	B-7
TP7504	C-6
TP7505	B-7
TP7506	B-8
TP7507	E-4
TP7581	E-3
Adjustment	
R7509	C-5
R7533	E-6
R7535	B-8
C7502	C-5
T7580	E-2

ADDRESS INFORMATION

3-34. RF CONVERTER SCHEMATIC DIAGRAM
— UNIT No. ENC87751 —

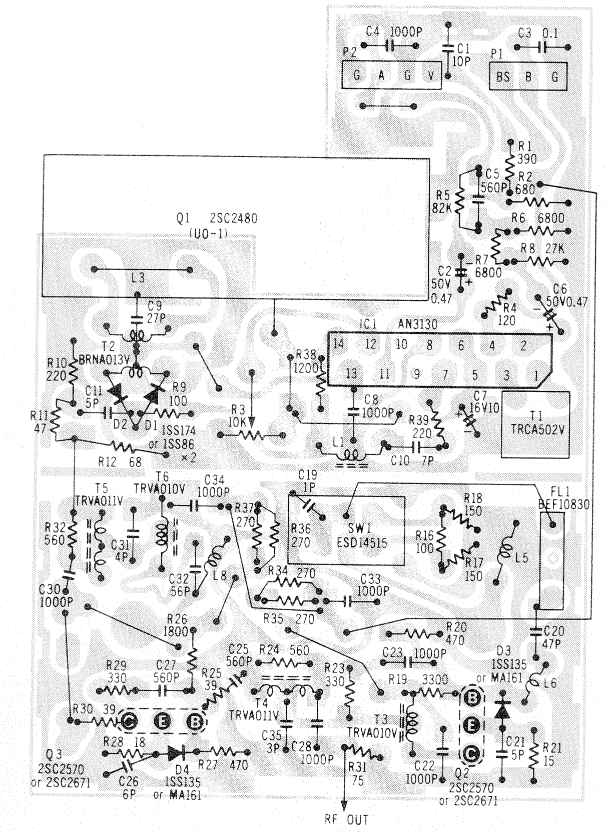

ANT. IN
VIDEO IN
GND
+B
AUDIO IN
VTR OUT
RF OUT
Q2 2SC2570
Q3 2SC2570
Q1 2SC2480
IC1 AN3130
T1 TRCA502V
SW1
FL1

— UNIT No. ENC87752 —

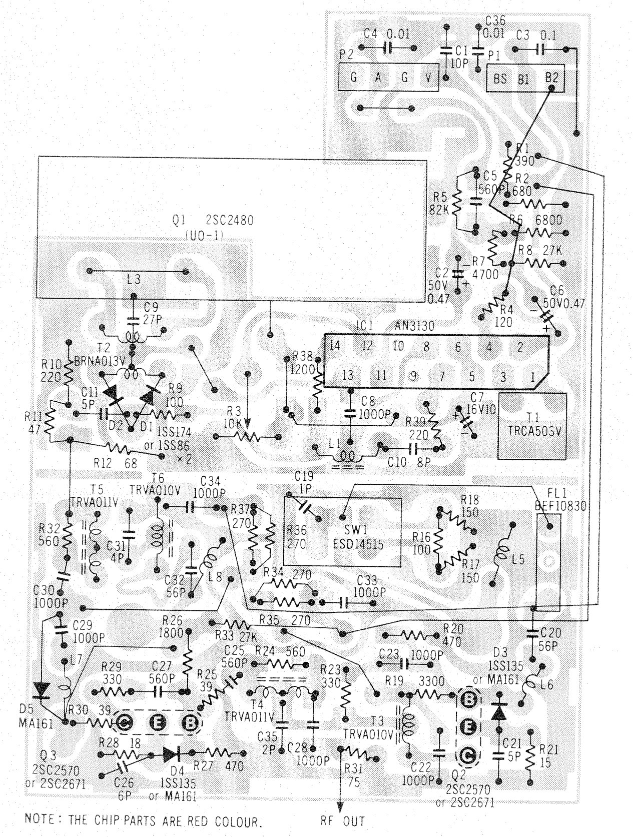

ANT. IN
B1
BS
VIDEO IN
GND
B2
AUDIO IN
VTR OUT
RF OUT
Q2 2SC2570
Q3 2SC2570
Q1 2SC2480
IC1 AN3130
T1 TRCA503V
D5 MA161
SW1
FL1

Back Page:
TIMER & TIMER OPERATION Section

3-35. RF CONVERTER CIRCUIT BOARD
— UNIT No. ENC87751 —


Q1 2SC2480 (UO-1)
IC1 AN3130
T1 TRCA502V
SW1 ESD14515
FL1 EFF10830
Q3 2SC2570 or 2SC2671
Q2 2SC2570 or 2SC2671
RF OUT

— UNIT No. ENC87752 —


Q1 2SC2480 (UO-1)
IC1 AN3130
T1 TRCA503V
SW1 ESD14515
FL1 EFF10830
D5 MA161
Q3 2SC2570 or 2SC2671
Q2 2SC2570 or 2SC2671
RF OUT

NOTE: THE CHIP PARTS ARE RED COLOUR.

SERVO CIRCUIT BOARD	
Transistor	
Q2001	G-11
Q2002	F-12
Q2003	F-12
Q2004	F-9
Q2005	E-9
Q2006	F-9
Transistor & Resistor	
QR2001	G-12
QR2002	G-10
QR2003	F-12
QR2004	F-11
QR2006	F-11
QR2007	G-10
QR2008	G-10
QR2009	E-8
QR2010	F-8
Integrated Circuit	
IC2001	G-11
IC2002	G-10
IC2003	G-8
IC2004	G-12
IC2005	F-11
IC2007	F-8
IC2008	G-10
IC2009	G-9
IC2010	F-10
Test Point	
TP2001	G-10
TP2002	G-10
TP2003	G-11
TP2004	G-11
TP2005	G-7
TP2007	G-10
TP2009	F-10
TP2010	F-9
TP2011	G-11
TP2013	F-9
TP2014	F-8
TP GND	F-9
Adjustment	
R2015	D-5
R2016	G-7
R2018	G-8
R2066	F-7
R2072	E-8
R2073	G-9
R2085	F-7

ADDRESS INFORMATION

LUMINANCE & CHROMINANCE CIRCUIT BOARD	
Transistor	
Q3001	B-12
Q3002	B-12
Q3004	C-12
Q3005	C-12
Q3006	C-12
Q8001	C-11
Q8003	C-10
Q8004	C-10
Q8006	D-12
Q8007	D-12
Q8008	D-10
Q8009	D-10
Transistor & Resistor	
QR3001	C-12
QR3002	C-12
QR3003	C-12
QR3050	D-11
QR8002	C-10
QR8003	B-12
QR8004	D-10
Integrated Circuit	
IC3001	B-13
IC3050	B-9
IC8001	D-11
IC8002	B-10
Test Point	
TP3001	B-12
TP3051	C-10
TP8001	D-10
TP8002	D-11
TP8003	D-11
TP8004	D-12
TP8005	B-10
TP GND	C-13
Adjustment	
R3018	D-5
R3056	B-9
L8009	B-10

ADDRESS INFORMATION

POWER SUPPLY CIRCUIT BOARD	
Transistor	
Q1001	E-13
Q1002	D-15
Q1003	E-12
Q1101	D-15
Q1102	E-12
Q1103	E-16
Q1201	D-18
Q1501	E-15
Test Point	
TP1001	E-12
TP1002	E-12
Adjustment	
R1003	E-12

ADDRESS INFORMATION

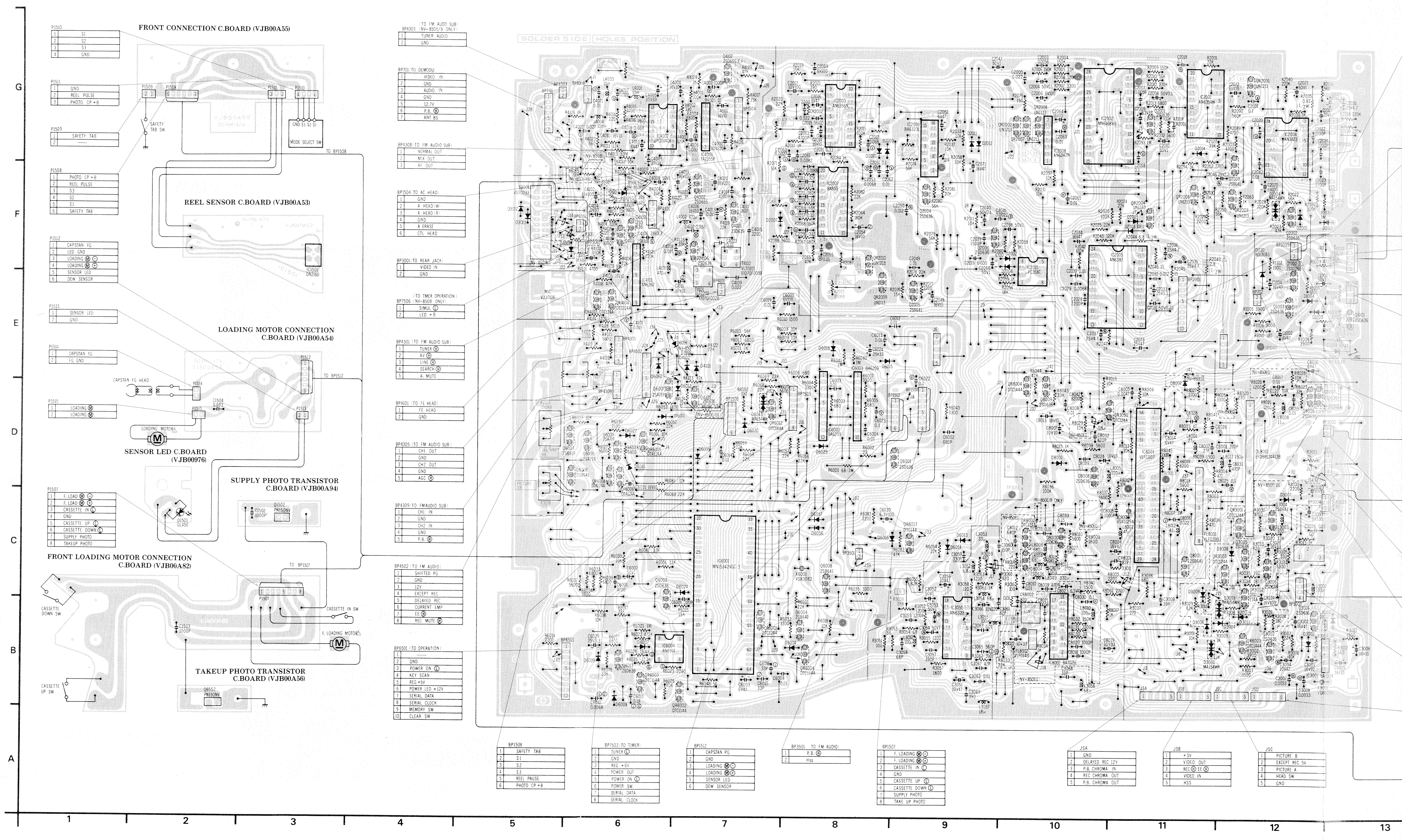
3-36. MAIN CIRCUIT BOARD Power Supply, Servo, Luminance (1), Audio, System Control & Chrominance (VEP03197A: NV-850EG/VEP03197B: NV-850B/VEP03197C: NV

AUDIO CIRCUIT BOARD	
Transistor	
Q4001	F-7
Q4002	F-7
Q4101	F-6
Q4102	F-6
Q4105	D-7
Q4106	F-7
Q4107	G-7
Transistor & Resistor	
QR4103	E-6
QR4104	E-6
Integrated Circuit	
IC4001	G-6
IC4002	G-7
IC4101	E-6
Test Point	
TP4001	G-6
TP4002	G-7
TP4003	G-7
Adjustment	
R4006	G-6
R4018	F-7
R4112	E-6

ADDRESS INFORMATION

SYSTEM CONTROL CIRCUIT BOARD	
Transistor	
Q1502	C-3
Q6001	D-9
Q6002	C-6
Q6003	D-6
Q6005	D-6
Q6006	D-6
Q6007	D-6
Q6008	C-8
Q6009	D-6
Q6012	B-6
Q6552	B-2
Transistor & Resistor	
QR6001	B-7
QR6002	B-7
QR6003	B-6
QR6004	B-8
QR6005	D-6
QR6006	D-6
QR6008	D-6
QR6012	D-7
QR6013	B-9
Integrated Circuit	
IC6001	C-7
IC6002	D-8
IC6003	D-8
IC6004	B-6
Test Point	
TP6001	B-8
TP6002	B-8

ADDRESS INFORMATION



FRONT CONNECTION C.BOARD (VJB00A55)
P1510: 1 S1, 2 S2, 3 S3, 4 GND
P1511: 1 GND, 2 REEL PULSE, 3 PHOTO CP +B
P1509: 1 SAFETY TAB, 2 —
P1508: 1 PHOTO CP +B, 2 REEL PULSE, 3 S3, 4 S2, 5 S1, 6 SAFETY TAB
SAFETY TAB SW
GND S3 S2 S1
MODE SELECT SW
TO BP1508
REEL SENSOR C.BOARD (VJB00A53)
IC1501 ON2160
P1512: 1 CAPSTAN FG, 2 LED GND, 3 LOADING Ⓜ ⊖, 4 LOADING Ⓜ ⊕, 5 SENSOR LED, 6 DEW SENSOR
P1513: 1 SENSOR LED, 2 GND
LOADING MOTOR CONNECTION C.BOARD (VJB00A54)
P1514: 1 CAPSTAN FG, 2 FG GND
CAPSTAN FG HEAD
C1504 0.033
TO BP1512
P1515: 1 LOADING Ⓜ, 2 LOADING Ⓜ
LOADING MOTOR
SENSOR LED C.BOARD (VJB00976)
D1501 GL450
SUPPLY PHOTO TRANSISTOR C.BOARD (VJB00A94)
C1502 1000P
Q1502 PN150NV
P1507: 1 F. LOAD Ⓜ ⊖, 2 F. LOAD Ⓜ ⊕, 3 CASSETTE IN Ⓛ, 4 GND, 5 CASSETTE UP Ⓛ, 6 CASSETTE DOWN Ⓛ, 7 SUPPLY PHOTO, 8 TAKEUP PHOTO
FRONT LOADING MOTOR CONNECTION C.BOARD (VJB00A82)
TO BP1507
CASSETTE DOWN SW
CASSETTE IN SW
C1503 1000P
F. LOADING MOTOR
TAKEUP PHOTO TRANSISTOR C.BOARD (VJB00A56)
Q6552 PN150NV
CASSETTE UP SW
BP4303 (TO FM AUDO SUB) (NV-850E/B ONLY): 1 TUNER AUDIO, 2 GND
BP701 (TO DEMODU): 1 VIDEO IN, 2 GND, 3 AUDIO IN, 4 GND, 5 12.7V, 6 P.B. Ⓗ, 7 ANT BS
BP4308 (TO FM AUDIO SUB): 1 NORMAL OUT, 2 MIX OUT, 3 RF OUT
BP1504 (TO AC HEAD): 1 GND, 2 A HEAD (W), 3 A HEAD (R), 4 GND, 5 A ERASE, 6 CTL HEAD
BP3001 (TO REAR JACK): 1 VIDEO IN, 2 GND
BP7506 (TO TMER OPERATION) (NV-850B ONLY): 1 SIMUL Ⓛ, 2 LED +B
BP4301 (TO FM AUDIO SUB): 1 TUNER Ⓗ, 2 AV Ⓗ, 3 LINE Ⓗ, 4 SEARCH Ⓗ, 5 A. MUTE
BP4101 (TO FE HEAD): 1 FE HEAD, 2 GND
BP4305 (TO FM AUDIO SUB): 1 CH1 OUT, 2 GND, 3 CH2 OUT, 4 GND, 5 AGC Ⓗ
BP4309 (TO FMAUDIO SUB): 1 CH1 IN, 2 GND, 3 CH2 IN, 4 GND, 5 P.B. Ⓗ
BP4502 (TO FM AUDIO): 1 SHIFTED PG, 2 GND, 3 12V, 4 EXCEPT REC, 5 DELAYED REC, 6 CURRENT EMP, 7 EE Ⓗ, 8 REC MUTE Ⓗ
BP6501 (TO OPERATION): 1 —, 2 GND, 3 POWER ON Ⓛ, 4 KEY SCAN, 5 REG +5V, 6 POWER LED +12V, 7 SERIAL DATA, 8 SERIAL CLOCK, 9 MEMORY SW, 10 CLEAR SW
SOLDER SIDE
HOLES POSITION
IC6001 MN15342NGC-1
JSA
JSB
JSC
JSD
BP1508: 1 SAFETY TAB, 2 S1, 3 S2, 4 S3, 5 REEL PAUSE, 6 PHOTO CP +B
BP7503 (TO TIMER): 1 TUNER Ⓛ, 2 GND, 3 REG +6V, 4 POWER OUT, 5 POWER ON Ⓛ, 6 POWER SW, 7 SERIAL DATA, 8 SERIAL CLOCK
BP1512: 1 CAPSTAN PG, 2 GND, 3 LOADING Ⓜ⊖, 4 LOADING Ⓜ⊕, 5 SENSOR LED, 6 DEW SENSOR
BP3501 (TO FM AUDIO): 1 P.B. Ⓗ, 2 Hss
BP1507: 1 F. LOADING Ⓜ⊖, 2 F. LOADING Ⓜ⊕, 3 CASSETTE IN Ⓛ, 4 GND, 5 CASSETTE UP Ⓛ, 6 CASSETTE DOWN Ⓛ, 7 SUPPLY PHOTO, 8 TAKE UP PHOTO
JSA: 1 GND, 2 DELAYED REC 12V, 3 P.B. CHROMA IN, 4 REC CHROMA OUT, 5 P.B. CHROMA OUT
JSB: 1 +5V, 2 VIDEO OUT, 3 REC Ⓗ EE Ⓗ, 4 VIDEO IN, 5 HSS
JSC: 1 PICTURE B, 2 EXCEPT REC 5V, 3 PICTURE A, 4 HEAD SW, 5 GND
G
F
E
D
C
B
A
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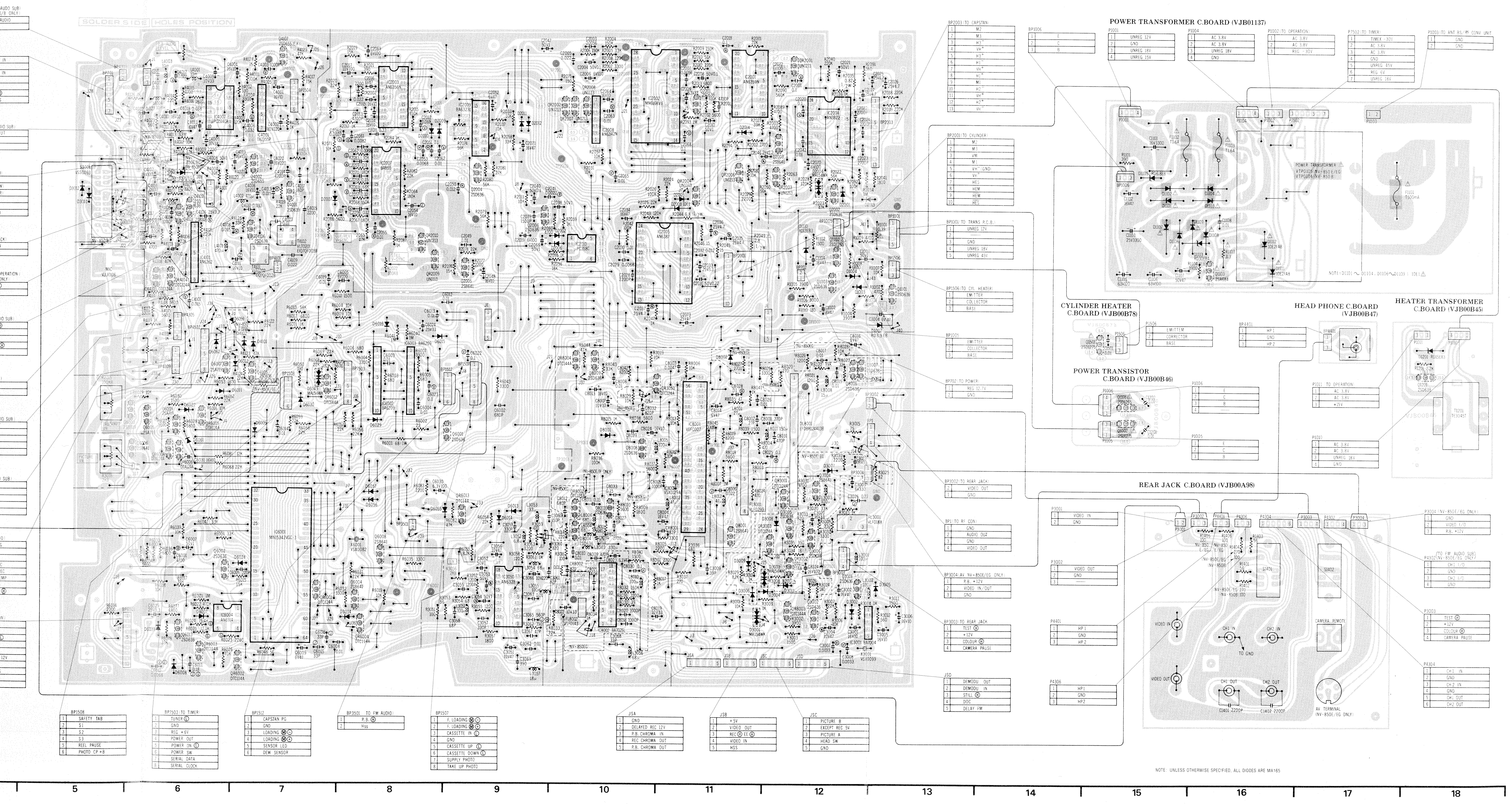
), Audio, System Control & Chrominance (VEP03197A: NV-850EG/VEP03197B: NV-850B/VEP03197C: NV-850E)


SOLDER SIDE
HOLES POSITION
BP1508
1 SAFETY TAB
2 S1
3 S2
4 S3
5 REEL PAUSE
6 PHOTO CP +B
BP7503 (TO TIMER)
1 TUNER Ⓛ
2 GND
3 REG +6V
4 POWER OUT
5 POWER ON Ⓛ
6 POWER SW
7 SERIAL DATA
8 SERIAL CLOCK
BP1512
1 CAPSTAN PG
2 GND
3 LOADING Ⓜ⊖
4 LOADING Ⓜ⊕
5 SENSOR LED
6 DEW SENSOR
BP3501 (TO FM AUDIO)
1 P.B. Ⓗ
2 Hss
BP1507
1 F. LOADING Ⓜ⊖
2 F. LOADING Ⓜ⊕
3 CASSETTE IN Ⓛ
4 GND
5 CASSETTE UP Ⓛ
6 CASSETTE DOWN Ⓛ
7 SUPPLY PHOTO
8 TAKE UP PHOTO
JSA
1 GND
2 DELAYED REC 12V
3 P.B. CHROMA IN
4 REC CHROMA OUT
5 P.B. CHROMA OUT
JSB
1 +5V
2 VIDEO OUT
3 REC Ⓗ EE Ⓗ
4 VIDEO IN
5 HSS
JSC
1 PICTURE B
2 EXCEPT REC 5V
3 PICTURE A
4 HEAD SW
5 GND
JSD
1 DEMODU OUT
2 DEMODU IN
3 STILL Ⓗ
4 DOC
5 DELAY FM
BP2003 (TO CAPSTAN)
1 M2
2 M3
3 H3⁻
4 VH⁺
5 H3⁺
6 H1⁻
7 VH⁺
8 H1⁺
9 M1
10 H2⁻
11 VH⁺
12 H2⁺
13 VH⁻
BP1006
1 E
2 C
3 B
BP2001 (TO CYLINDER)
1 M2
2 M3
3 VM
4 M1
5 VH⁻ (GND)
6 VH⁺
7 HES
8 HEM
9 HEM
10 HES
BP1001 (TO TRANS P.C.B.)
1 UNREG 12V
2 ——
3 GND
4 UNREG 18V
5 UNREG 45V
BP1506 (TO CYL HEATER)
1 EMITTER
2 COLLECTOR
3 BASE
BP1005
1 EMITTER
2 COLLECTOR
3 BASE
BP702 (TO POWER)
1 REG 12.7V
2 GND
BP3002 (TO REAR JACK)
2 VIDEO OUT
1 GND
BP1 (TO RF CON)
1 GND
2 AUDIO OUT
3 GND
4 VIDEO OUT
BP3004 (AV NV-850E/EG ONLY)
1 P.B. +12V
2 VIDEO IN/OUT
3 GND
BP3003 (TO REAR JACK
1 TEST Ⓗ
2 +12V
3 COLOUR Ⓗ
4 CAMERA PAUSE
POWER TRANSFORMER C.BOARD (VJB01137)
P1001
1 UNREG 12V
2 GND
3 UNREG 18V
4 UNREG 15V
P1004
1 AC 3.8V
2 AC 3.8V
3 UNREG 18V
4 GND
P1002 (TO OPERATION)
1 AC 3.8V
2 AC 3.8V
3 REG -30V
P7502 (TO TIMER)
1 TIMEX -30V
2 AC 3.8V
3 AC 3.8V
4 GND
5 UNREG 45V
6 REG 6V
7 UNREG 18V
P1003 (TO ANT BS/RF CONV UNIT
1 GND
2 GND
POWER TRANSFORMER
VTP0105 (NV-850E/EG)
VTP0104 (NV-850B)
NOTE: D1101 ~ D1104, D1106 ~ D1109 : 10E1
CYLINDER HEATER C.BOARD (VJB00B78)
P1506
1 EMITTEM
2 CORRECTOR
3 BASE
POWER TRANSISTOR C.BOARD (VJB00B46)
P1006
1 E
2 C
3 B
4 ——
P1005
1 E
2 C
3 B
HEAD PHONE C.BOARD (VJB00B47)
BP4401
1 HP1
2 GND
3 HP2
HEATER TRANSFORMER C.BOARD (VJB00B45)
P1011 (TO OPERATION)
1 AC 3.8V
2 AC 3.8V
3 +15V
P1010
1 AC 3.8V
2 AC 3.8V
3 UNREG 18V
4 GND
T1201 TE3045T
REAR JACK C.BOARD (VJB00A98)
P3001
1 VIDEO IN
2 GND
P3002
1 VIDEO OUT
2 GND
3 ——
P4401
1 HP1
2 GND
3 HP2
P4306
1 HP1
2 GND
3 HP2
P3004 (NV-850E/EG ONLY)
1 GND
2 VIDEO I/O
3 P.B. +12V
P4302 (TO FM AUDIO SUB) (NV-850E/EG ONLY)
1 CH1 I/O
2 GND
3 CH2 I/O
4 GND
P3003
1 TEST Ⓗ
2 +12V
3 COLOUR Ⓗ
4 CAMERA PAUSE
P4304
1 CH1 IN
2 GND
3 CH2 IN
4 GND
5 CH1 OUT
6 CH2 OUT
VIDEO IN
VIDEO OUT
CH1 IN
CH2 IN
TO GND
CH1 OUT
CH2 OUT
C1401 2200P
C1402 2200P
CAMERA REMOTE
AV TERMINAL (NV-850E/EG ONLY)
S1401
S1402
IC6001 MN15342VGC
NOTE: UNLESS OTHERWISE SPECIFIED, ALL DIODES ARE MA165
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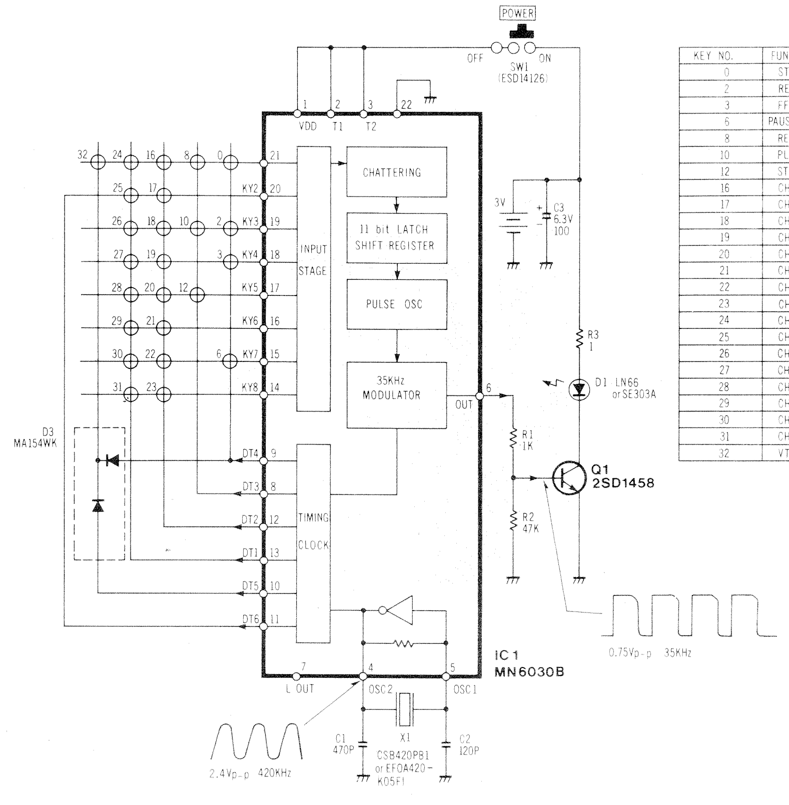
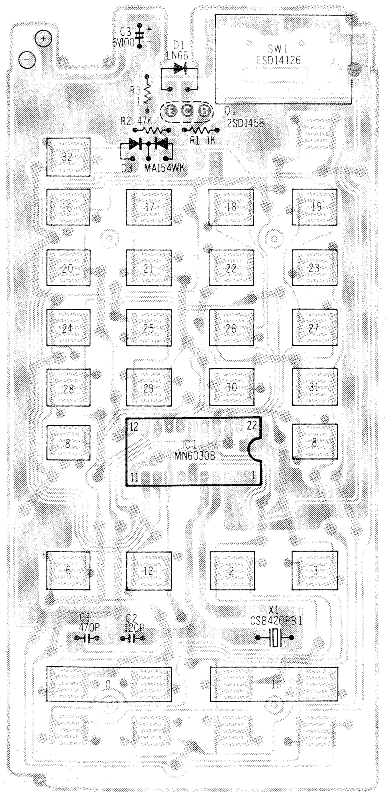
Next Page:
REMOTE CONTROLLER & CIRCUIT BOARD LAYOUT Section

3-37. REMOTE CONTROLLER SCHEMATIC DIAGRAM AND CIRCUIT BOARD


POWER
OFF
ON
SW1
(ESD14126)
VDD
T1
T2
CHATTERING
11 bit LATCH
SHIFT REGISTER
PULSE OSC
35KHz
MODULATOR
INPUT
STAGE
TIMING
CLOCK
OUT
L OUT
OSC2
OSC1
KY2
KY3
KY4
KY5
KY6
KY7
KY8
DT1
DT2
DT3
DT4
DT5
DT6
3V
C3
6.3V
100
R3
1
D1 LN66
or SE303A
R1
1K
R2
47K
Q1
2SD1458
D3
MA154WK
IC 1
MN6030B
C1
470P
X1
CSB420PB1
or EFOA420-
K05F1
C2
120P
2.4Vp-p 420KHz
0.75Vp-p 35KHz

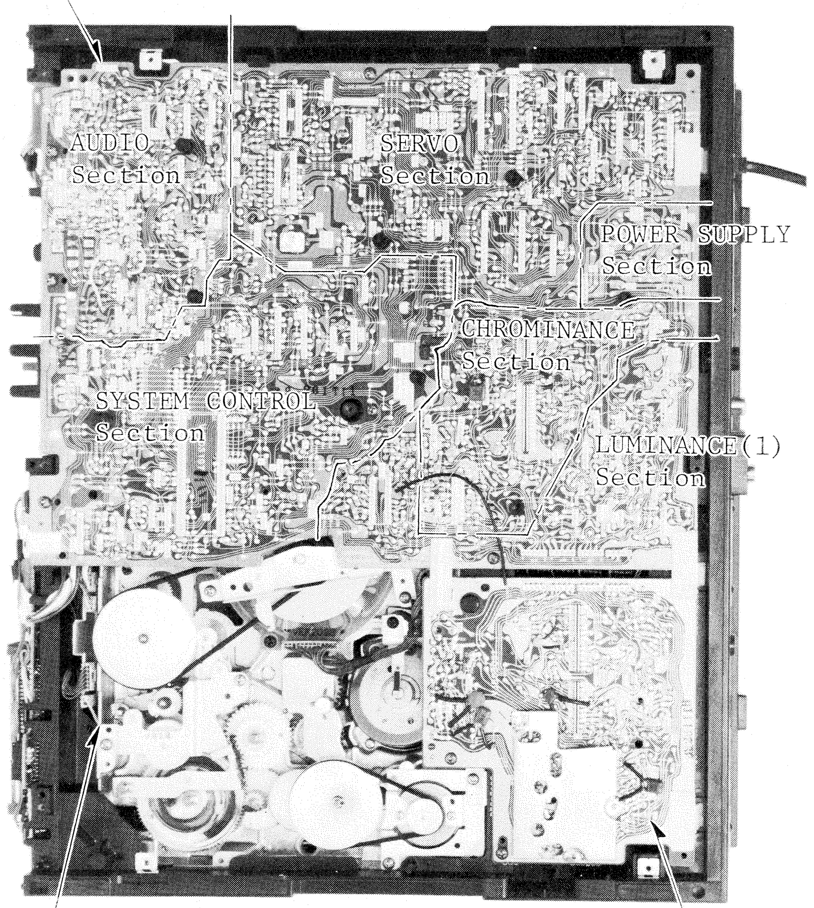
KEY NO.	FUNCTION
0	STOP
2	REW
3	FF
6	PAUSE/STILL
8	REC
10	PLAY
12	STILL ADV
16	CH1
17	CH2
18	CH3
19	CH4
20	CH5
21	CH6
22	CH7
23	CH8
24	CH9
25	CH10
26	CH11
27	CH12
28	CH13
29	CH14
30	CH15
31	CH16
32	VTR

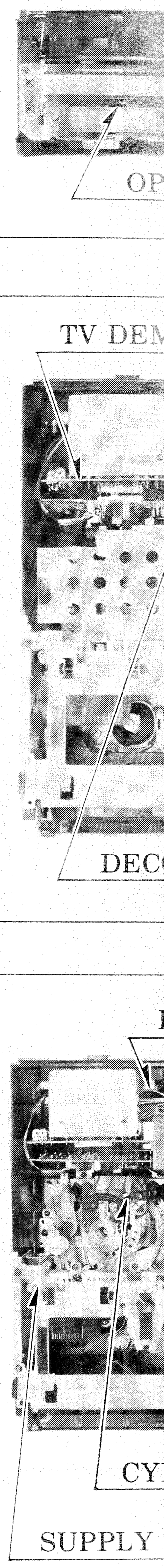
— CIRCUIT BOARD No. VJB00C08 —


C3
6V100
D1
LN66
SW1
ESD14126
R3
1
Q1
2SD1458
R2 47K
R1 1K
D3 MA154WK
IC1
MN6030B
C1
470P
C2
120P
X1
CSB420PB1

3-38. CIRCUIT BOARD LAYOUT

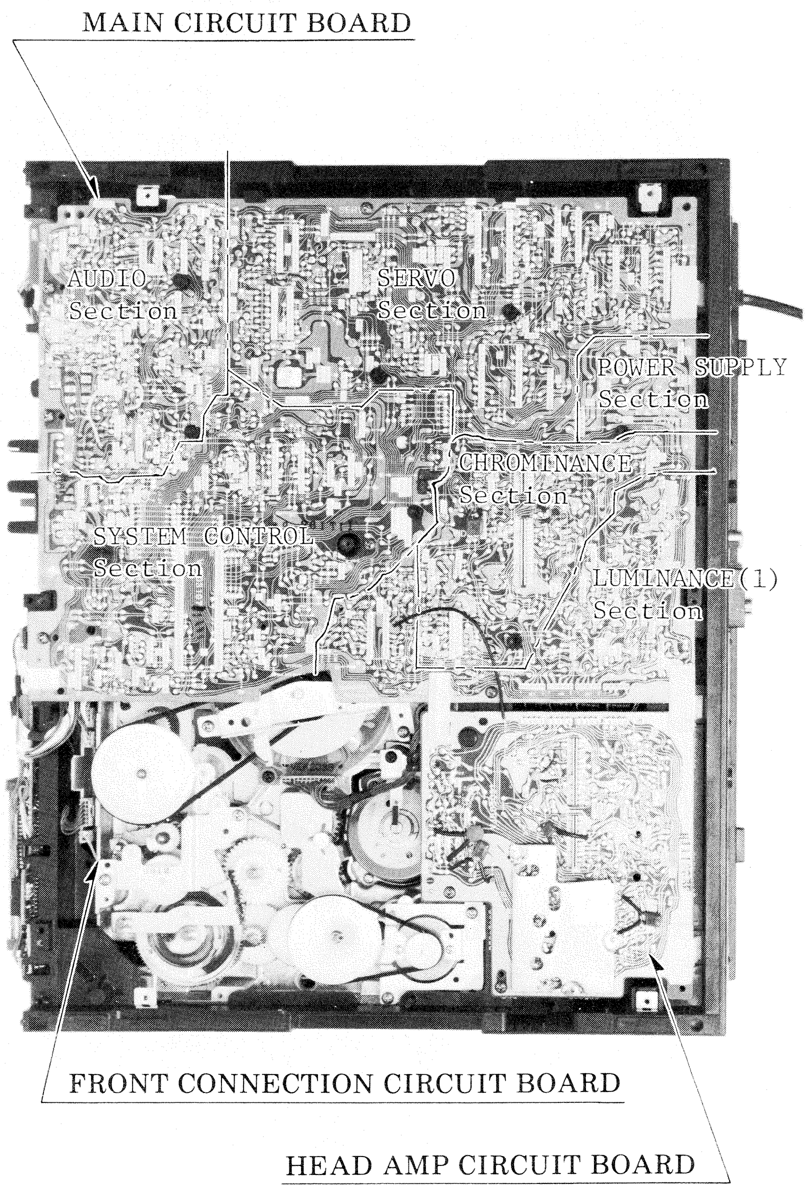
BOTTOM VIEW


MAIN CIRCUIT BOARD
AUDIO Section
SERVO Section
POWER SUPPLY Section
CHROMINANCE Section
SYSTEM CONTROL Section
LUMINANCE(1) Section
FRONT CONNECTION CIRCUIT BOARD
HEAD AMP CIRCUIT BOARD

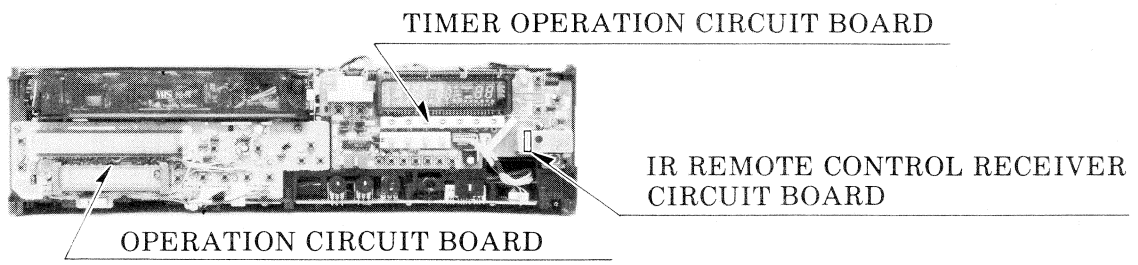

OP
TV DEM
DEC
CY
SUPPLY

3-38. CIRCUIT BOARD LAYOUT

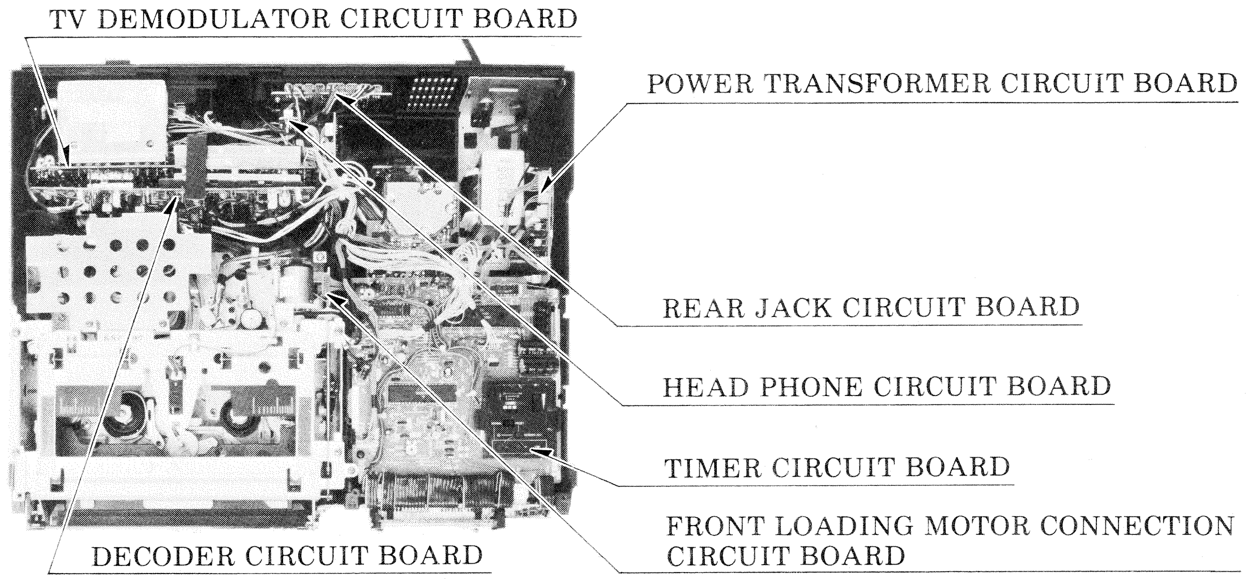
BOTTOM VIEW


MAIN CIRCUIT BOARD
AUDIO Section
SERVO Section
POWER SUPPLY Section
CHROMINANCE Section
SYSTEM CONTROL Section
LUMINANCE(1) Section
FRONT CONNECTION CIRCUIT BOARD
HEAD AMP CIRCUIT BOARD

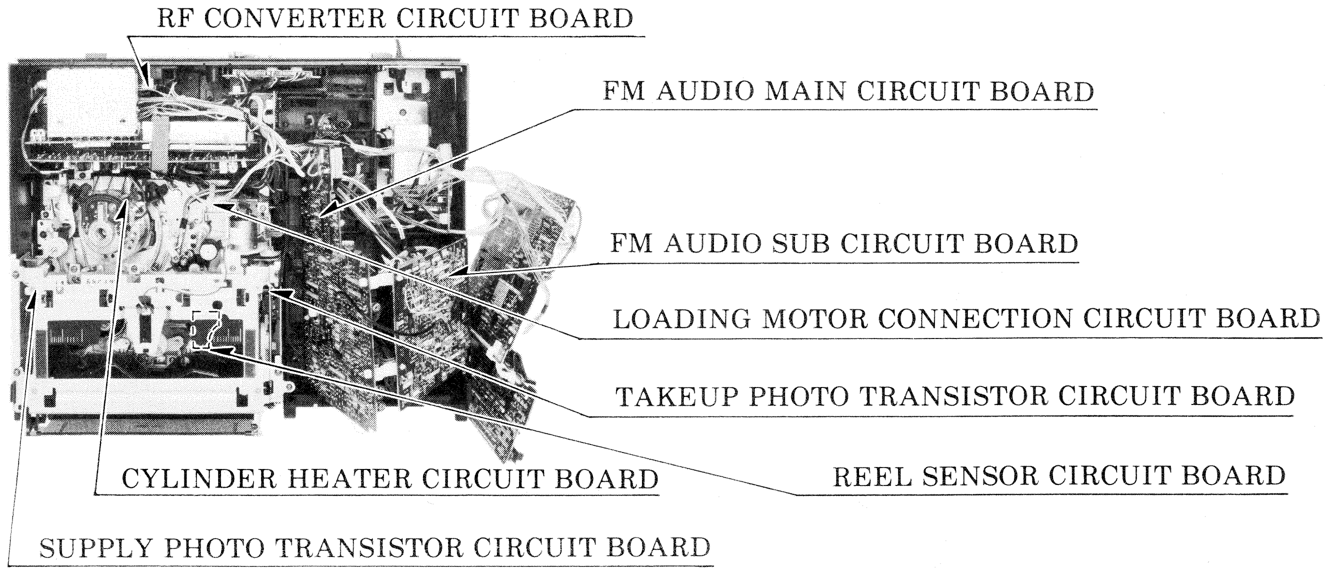
FRONT VIEW


TIMER OPERATION CIRCUIT BOARD
IR REMOTE CONTROL RECEIVER CIRCUIT BOARD
OPERATION CIRCUIT BOARD

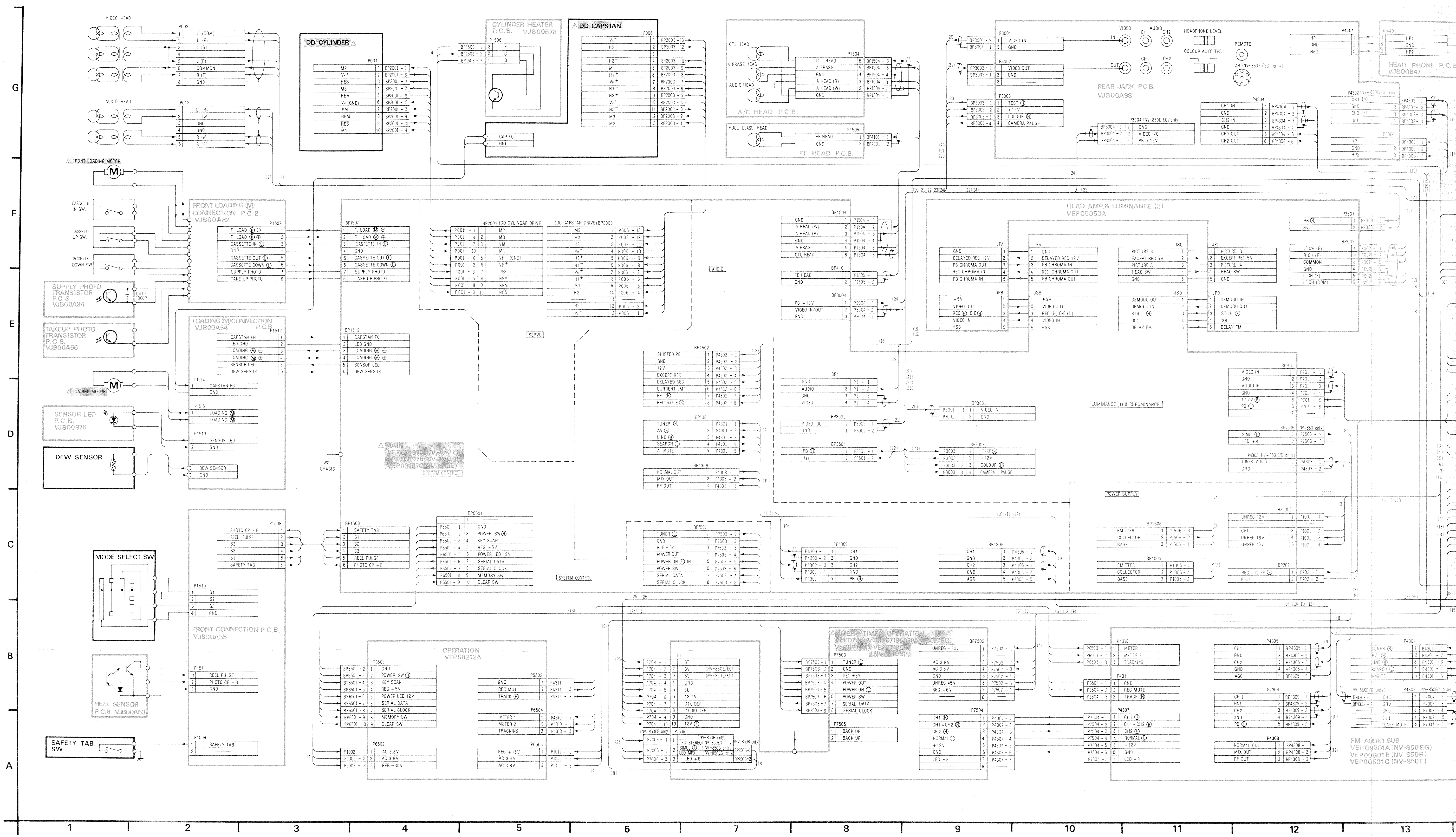
TOP VIEW (1)


TV DEMODULATOR CIRCUIT BOARD
POWER TRANSFORMER CIRCUIT BOARD
REAR JACK CIRCUIT BOARD
HEAD PHONE CIRCUIT BOARD
TIMER CIRCUIT BOARD
FRONT LOADING MOTOR CONNECTION CIRCUIT BOARD
DECODER CIRCUIT BOARD

TOP VIEW (2)


RF CONVERTER CIRCUIT BOARD
FM AUDIO MAIN CIRCUIT BOARD
FM AUDIO SUB CIRCUIT BOARD
LOADING MOTOR CONNECTION CIRCUIT BOARD
TAKEUP PHOTO TRANSISTOR CIRCUIT BOARD
REEL SENSOR CIRCUIT BOARD
CYLINDER HEATER CIRCUIT BOARD
SUPPLY PHOTO TRANSISTOR CIRCUIT BOARD

3-39. INTERCONNECTION SCHEMATIC DIAGRAM


VIDEO HEAD
AUDIO HEAD
DD CYLINDER
CYLINDER HEATER P.C.B. VJB00B78
DD CAPSTAN
CAP FG
CTL HEAD
A ERASE HEAD
AUDIO HEAD
A/C HEAD P.C.B.
FULL ERASE HEAD
FE HEAD P.C.B.
REAR JACK P.C.B. VJB00A98
VIDEO
AUDIO
CH1
CH2
HEADPHONE LEVEL
COLOUR AUTO TEST
REMOTE
AV (NV-850E/EG only)
HEAD PHONE P.C.B. VJB00B47
FRONT LOADING MOTOR
CASSETTE IN SW
CASSETTE UP SW
CASSETTE DOWN SW
FRONT LOADING Ⓜ CONNECTION P.C.B. VJB00A82
SUPPLY PHOTO TRANSISTOR P.C.B. VJB00A94
TAKEUP PHOTO TRANSISTOR P.C.B. VJB00A56
LOADING Ⓜ CONNECTION P.C.B. VJB00A54
LOADING MOTOR
SENSOR LED P.C.B. VJB00976
DEW SENSOR
MODE SELECT SW
FRONT CONNECTION P.C.B. VJB00A55
REEL SENSOR P.C.B. VJB00A53
SAFETY TAB SW
MAIN VEP03197A (NV-850EG) VEP03197B (NV-850B) VEP03197C (NV-850E)
SERVO
SYSTEM CONTROL
AUDIO
CHASIS
HEAD AMP.& LUMINANCE (2) VEP05053A
LUMINANCE (1) & CHROMINANCE
POWER SUPPLY
OPERATION VEP06212A
TIMER & TIMER OPERATION VEP07196A/VEP07196A (NV-850E/EG) VEP07195B/VEP07196B (NV-850B)
FM AUDIO SUB VEP00B01A (NV-850EG) VEP00B01B (NV-850B) VEP00B01C (NV-850E)
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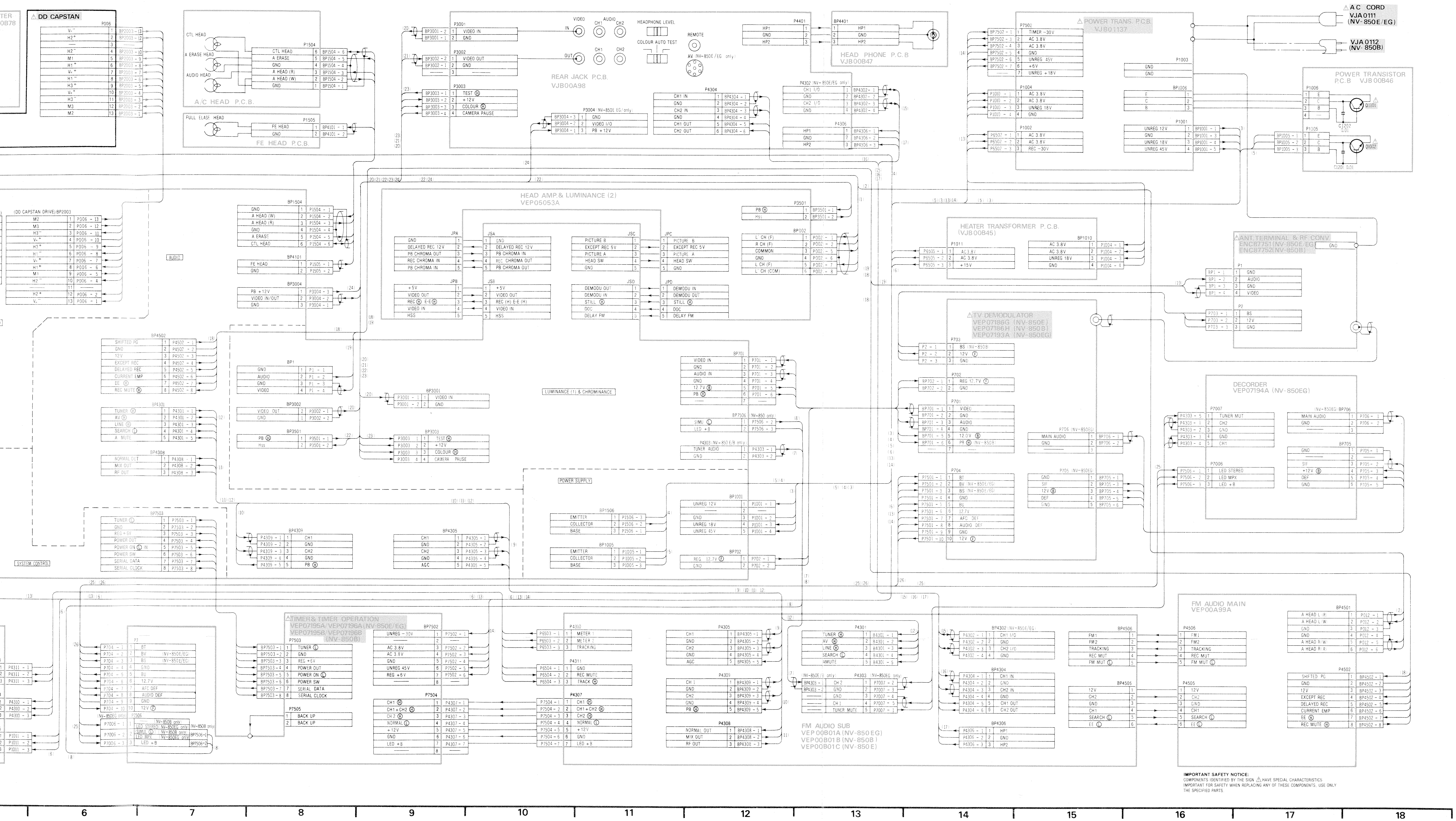
△DD CAPSTAN
CTL HEAD
A ERASE HEAD
AUDIO HEAD
A/C HEAD P.C.B.
FULL ERASE HEAD
FE HEAD P.C.B.
VIDEO
AUDIO
CH1
CH2
HEADPHONE LEVEL
COLOUR AUTO TEST
REMOTE
AV (NV-850E/EG only)
REAR JACK P.C.B.
VJB00A98
HEAD PHONE P.C.B
VJB00B47
△POWER TRANS. P.C.B.
VJB01137
△A C CORD
VJA0111 (NV-850E/EG)
VJA0112 (NV-850B)
POWER TRANSISTOR P.C.B VJB00B46
HEAD AMP.& LUMINANCE (2)
VEP05053A
(DD CAPSTAN DRIVE) BP2003
AUDIO
HEATER TRANSFORMER P.C.B.
(VJB00B45)
△ANT.TERMINAL & RF CONV
ENC87751(NV-850E/EG)
ENC87752(NV-850B)
△TV DEMODULATOR
VEP07186G (NV-850E)
VEP07186H (NV-850B)
VEP07193A (NV-850EG)
LUMINANCE (1) & CHROMINANCE
DECORDER
VEP07194A (NV-850EG)
POWER SUPPLY
SYSTEM CONTROL
△TIMER & TIMER OPERATION
VEP07195A/VEP07196A(NV-850E/EG)
VEP07195B/VEP07196B
(NV-850B)
FM AUDIO SUB
VEP00B01A (NV-850EG)
VEP00B01B (NV-850B)
VEP00B01C (NV-850E)
FM AUDIO MAIN
VEP00A99A
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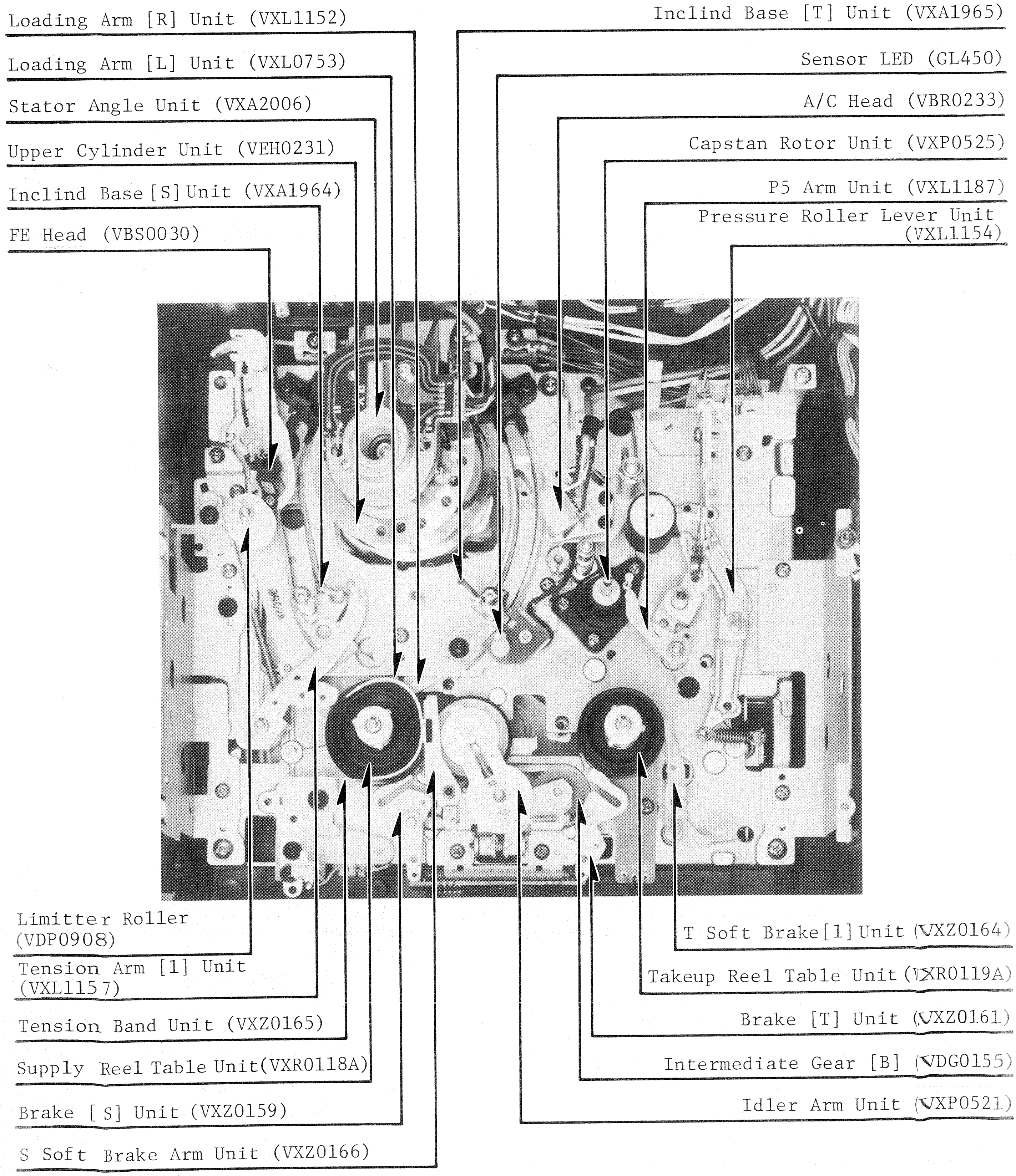
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN △ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

SECTION 4
EXPLODED VIEWS AND PARTS LIST

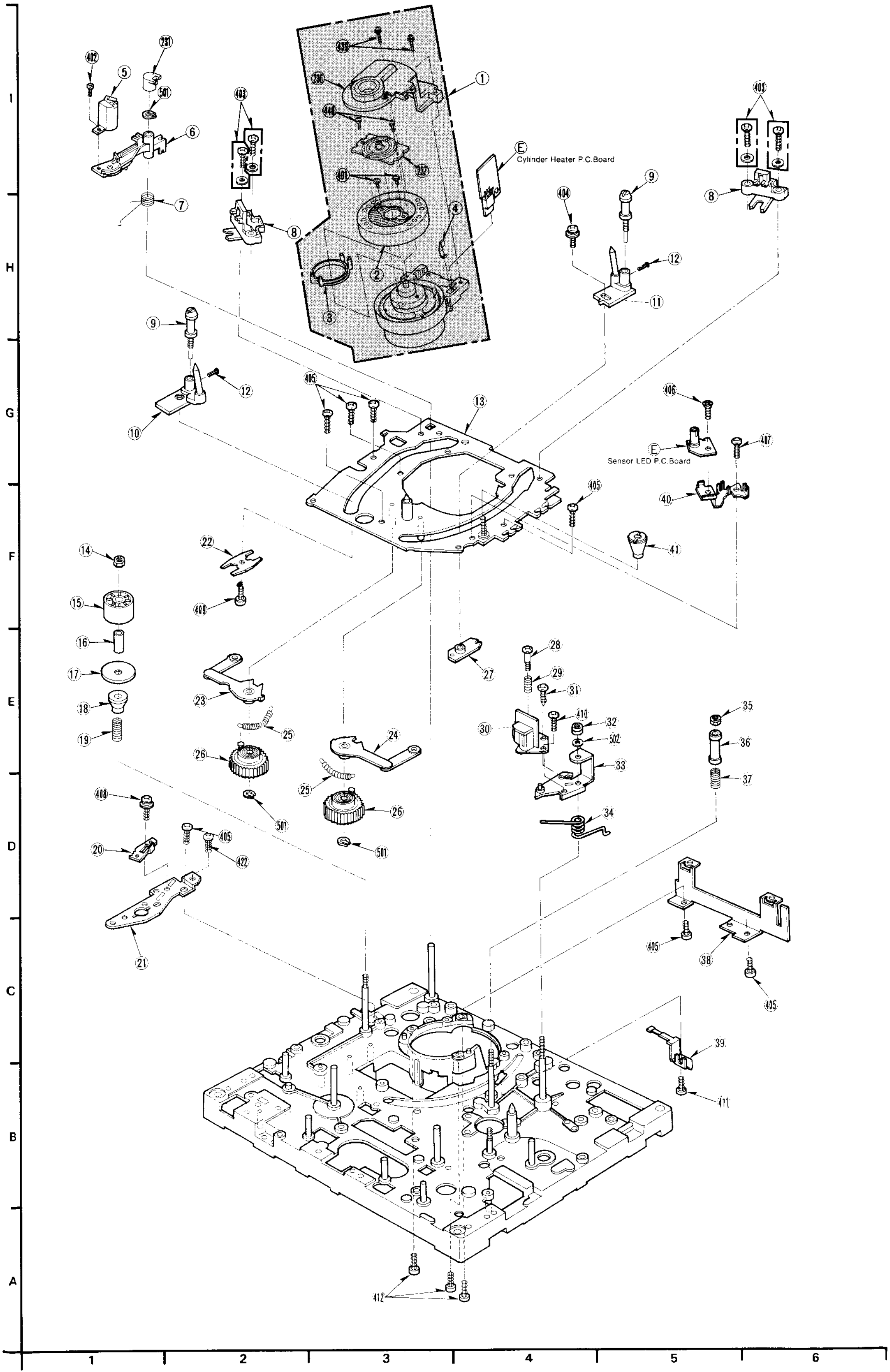
4-1. INNER PARTS LOCATION

TOP VIEW


Loading Arm [R] Unit (VXL1152)
Loading Arm [L] Unit (VXL0753)
Stator Angle Unit (VXA2006)
Upper Cylinder Unit (VEH0231)
Inclind Base [S] Unit (VXA1964)
FE Head (VBS0030)
Inclind Base [T] Unit (VXA1965)
Sensor LED (GL450)
A/C Head (VBR0233)
Capstan Rotor Unit (VXP0525)
P5 Arm Unit (VXL1187)
Pressure Roller Lever Unit (VXL1154)
Limitter Roller (VDP0908)
Tension Arm [1] Unit (VXL1157)
Tension Band Unit (VXZ0165)
Supply Reel Table Unit(VXR0118A)
Brake [S] Unit (VXZ0159)
S Soft Brake Arm Unit (VXZ0166)
T Soft Brake[1] Unit (VXZ0164)
Takeup Reel Table Unit (VXR0119A)
Brake [T] Unit (VXZ0161)
Intermediate Gear [B] (VDG0155)
Idler Arm Unit (VXP0521)

4-2. EXPLODED VIEW

❶ TRANSPORT SECTION



I
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C
B
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402
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231
501
6
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403
8
439
236
1
440
237
401
4
2
3
E
Cylinder Heater P.C.Board
9
404
12
11
403
8
9
12
10
405
13
406
E
Sensor LED P.C.Board
407
405
40
41
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15
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17
18
19
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409
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501
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501
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410
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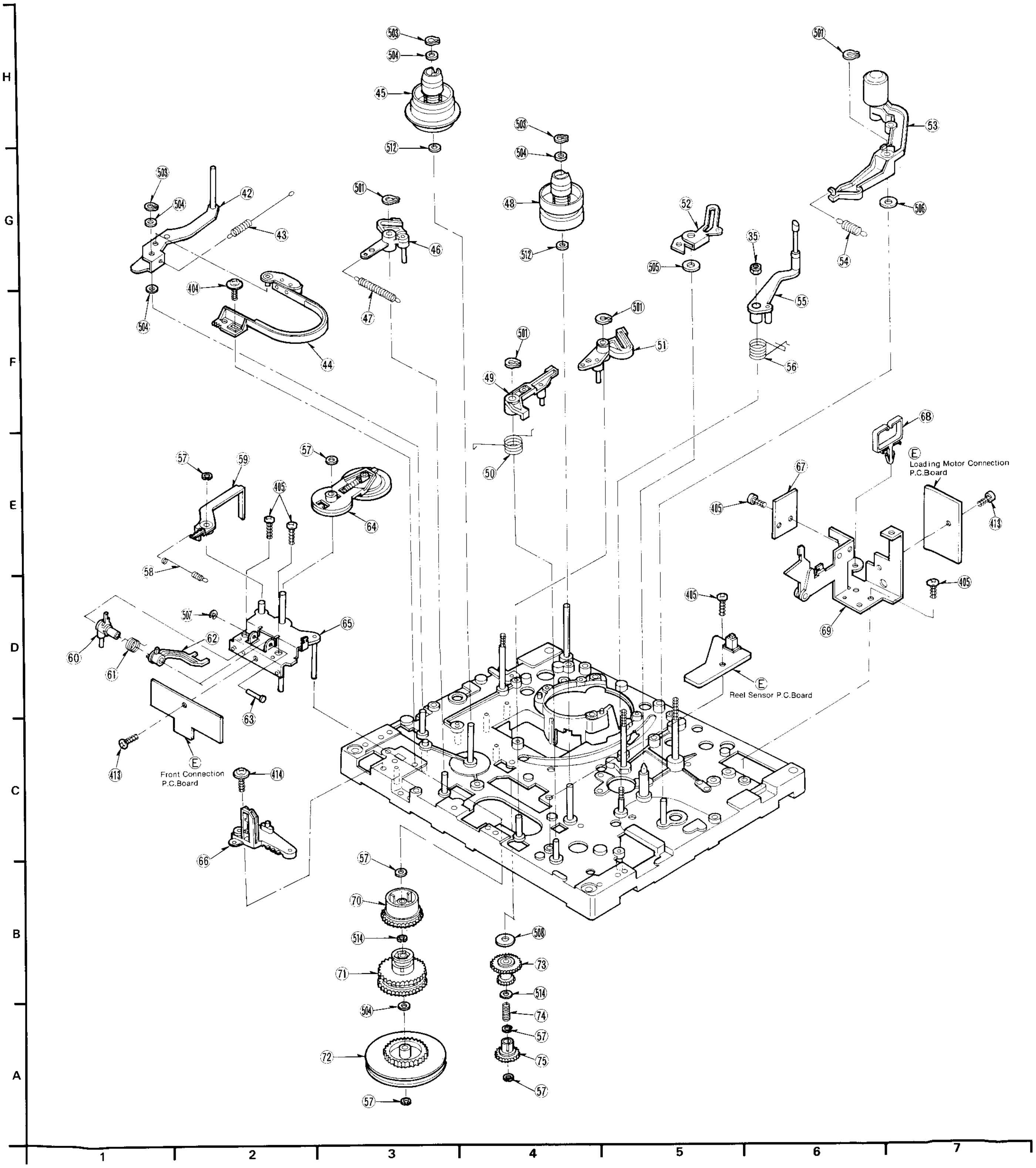
❷ MOVING MECHANISM SECTION



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504
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512
501
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503
504
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512
503
504
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504
501
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505
35
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506
54
404
44
501
51
56
49
501
50
68
Ⓔ
Loading Motor Connection P.C.Board
67
57
59
57
405
64
405
413
58
405
405
69
507
65
60
61
62
63
Ⓔ
Reel Sensor P.C.Board
413
Ⓔ
Front Connection P.C.Board
414
66
57
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514
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504
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508
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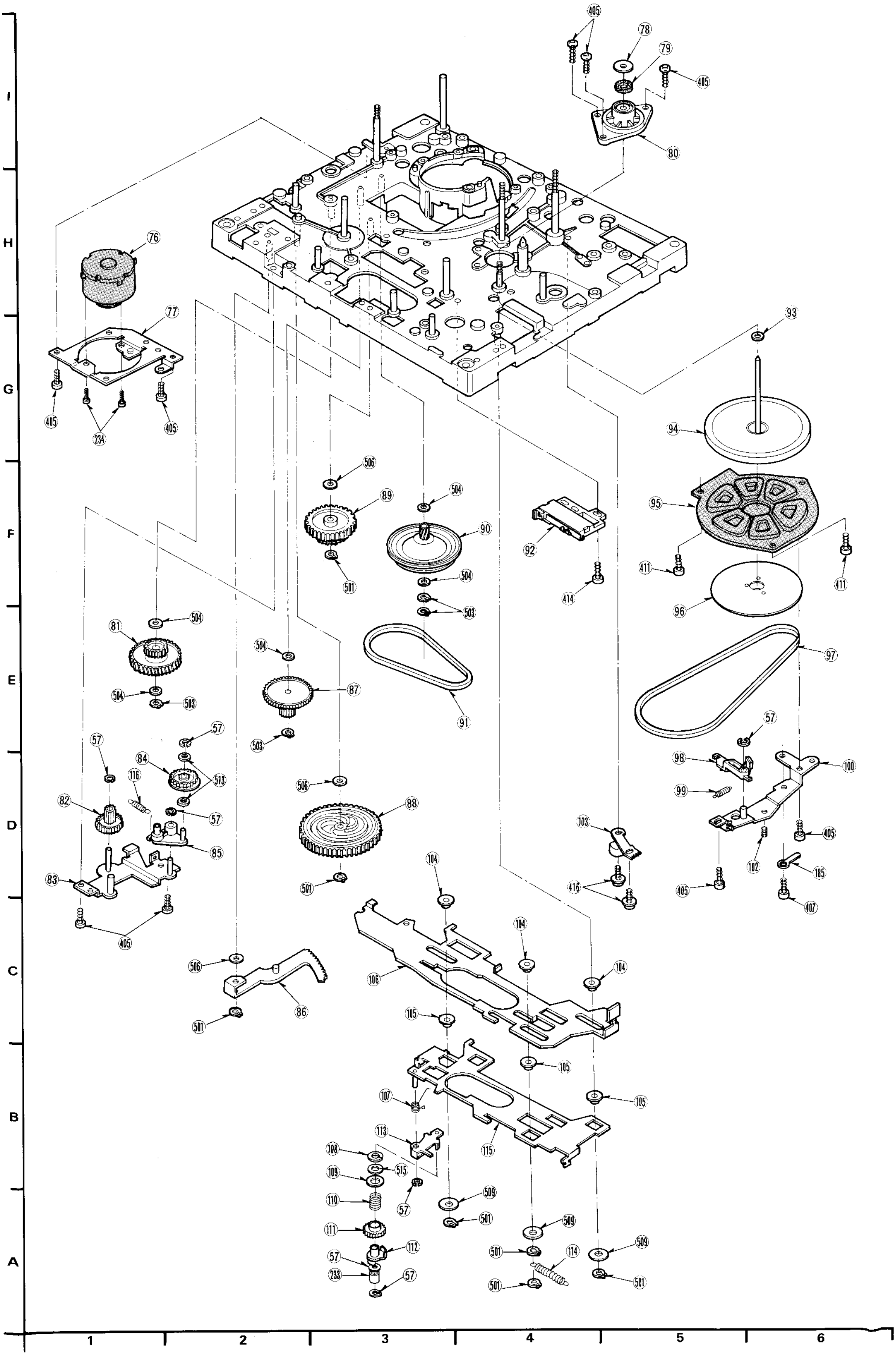
57

❸ CHASSIS PARTS SECTION



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405
234
405
93
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411
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501
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414
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513
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116
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506
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185
405
407
416
104
104
104
106
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86
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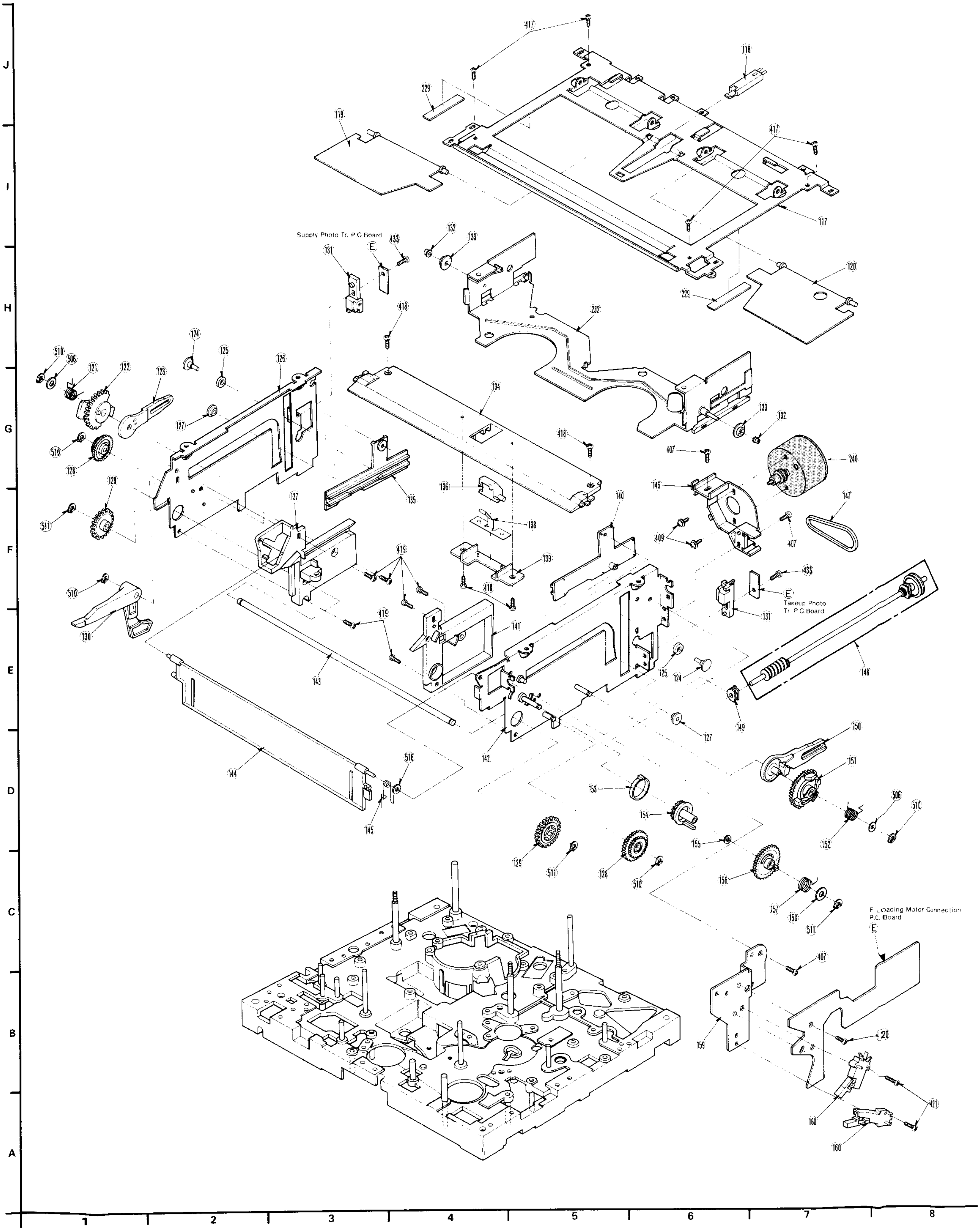
105
107
115
113
108
515
109
110
57
509
501
111
112
57
233
57
509
501
114
501
509
501

❹ CASSETTE UP MECHANISM SECTION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Takeup Photo Tr. P.C.Board
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F Loading Motor Connection P.C. Board
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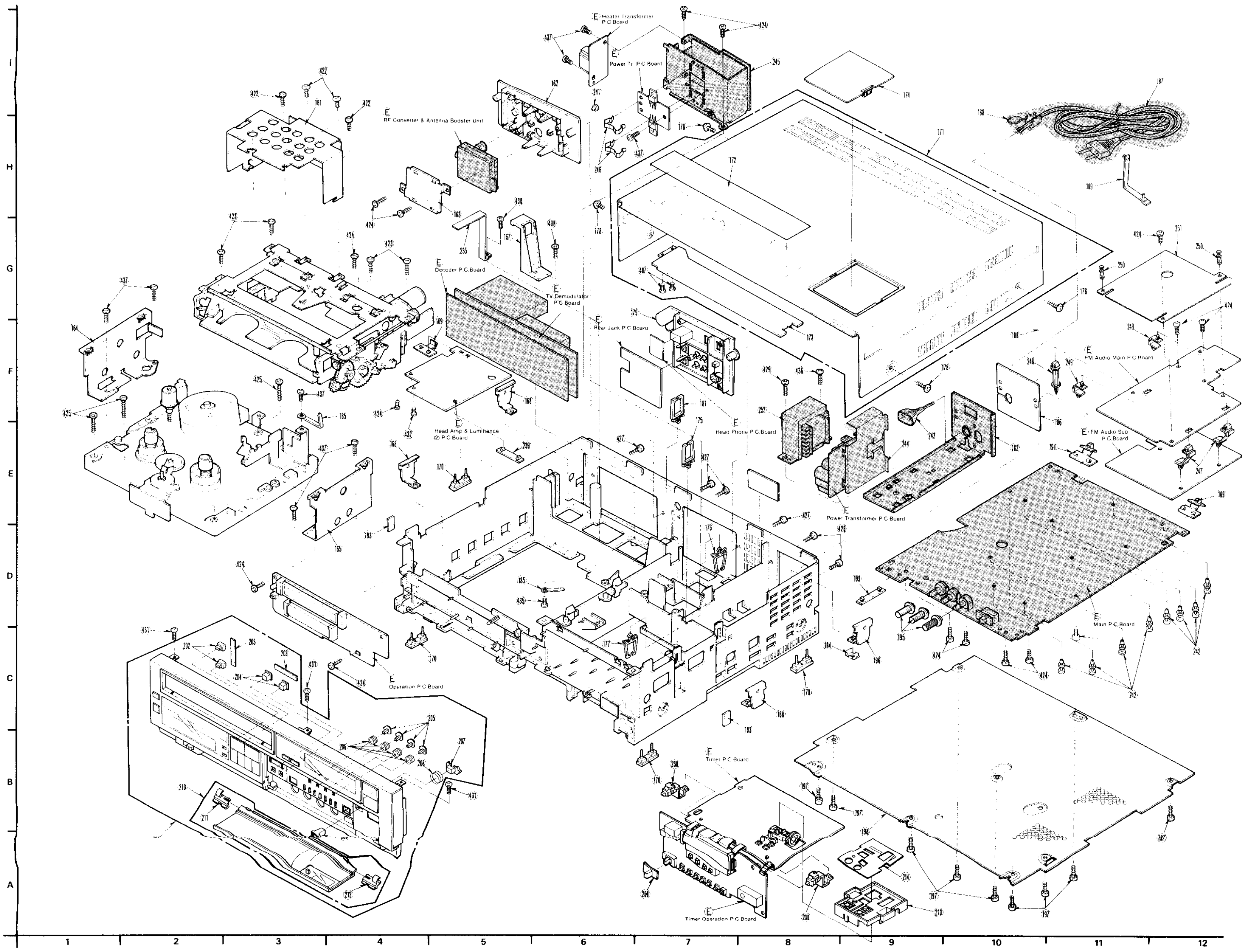
❺ CASING PARTS SECTION



E Heater Transformer P.C Board
E Power Tr. P.C Board
E RF Converter & Antenna Booster Unit
E Decoder P.C.Board
E TV Demodulator P.C Board
E Rear Jack P.C Board
E Head Amp & Luminance (2) P.C Board
E Head Phone P.C.Board
E Power Transformer P.C Board
E FM Audio Main P.C Board
E FM Audio Sub P.C.Board
E Main P.C.Board
E Operation P.C Board
E Timer P.C Board
E Timer Operation P.C Board
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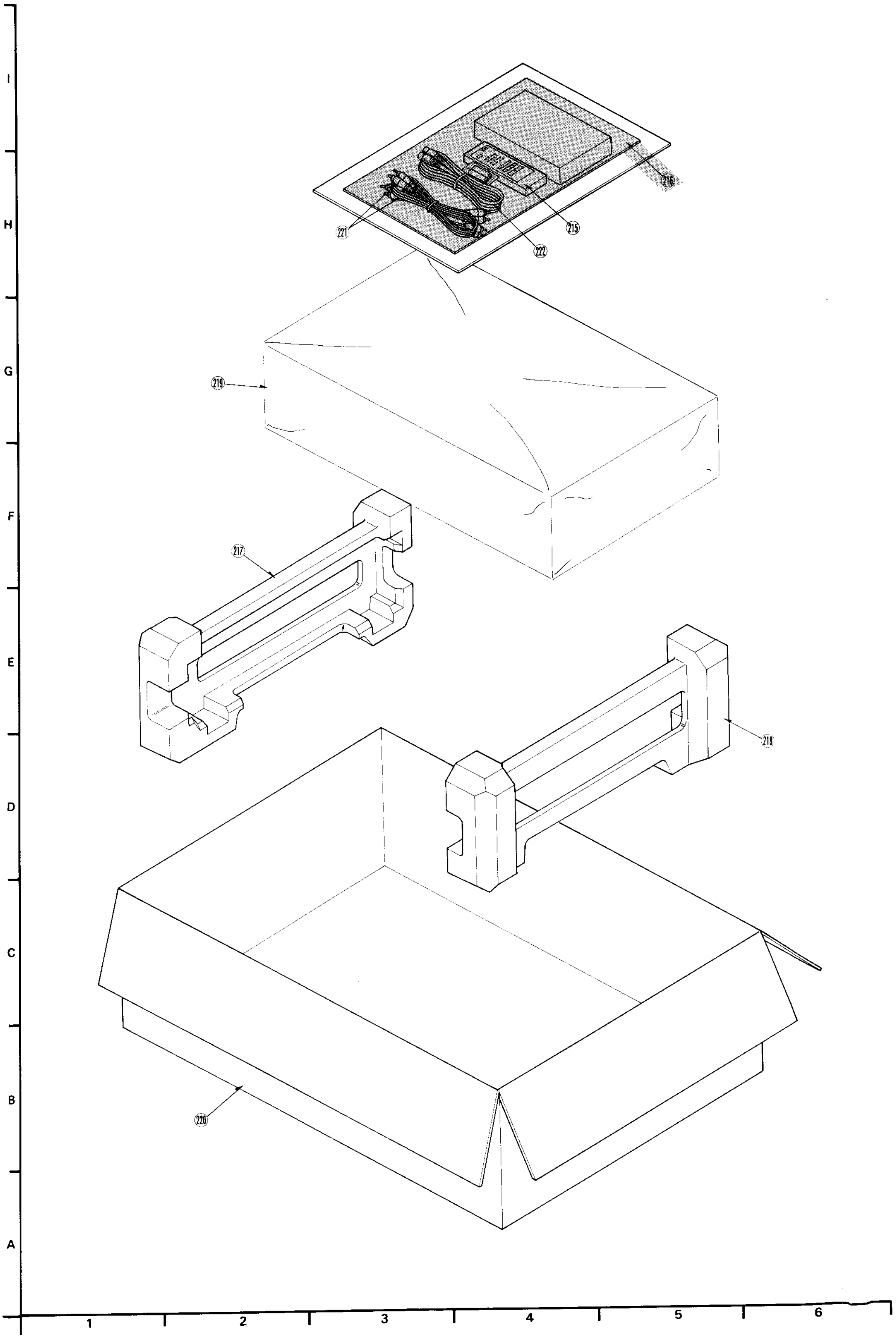
⑥ PACKING PARTS SECTION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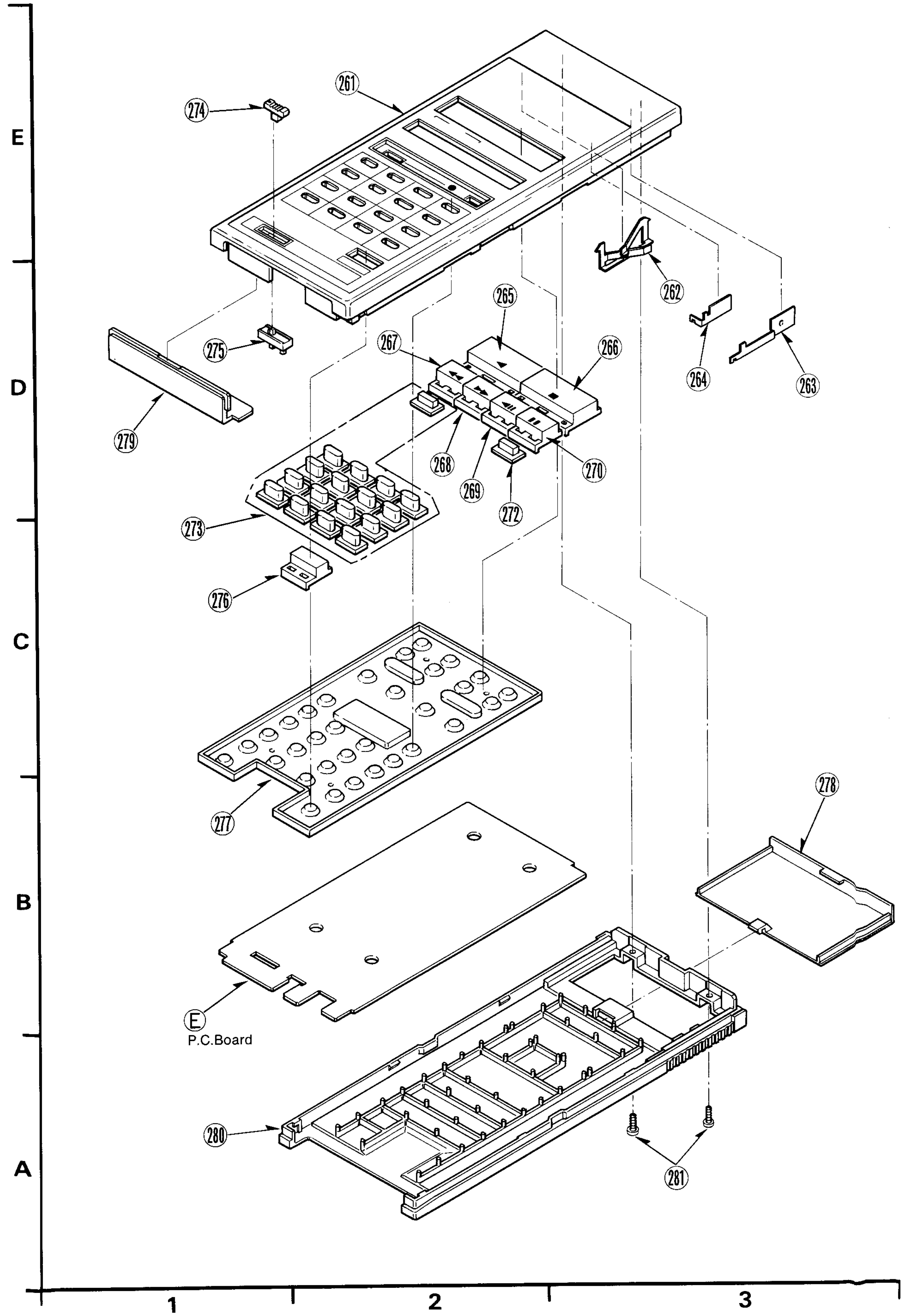
❼ REMOTE CONTROL UNIT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P.C.Board
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4-3. MECHANICAL REPLACEMENT PARTS LIST

Notes: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified by ⚠ have special characteristics important for safety. When replacing any of these components, use only the original ones.

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
1(1)		VEG0316	DD Cylinder Unit	1	⚠
2(1)		VEH0231	Uppwer Cylinder Unit	1	
3(1)		VJR0094	RT Terminal	1	
4(1)		VMC0051	Cylinder Heater P.C.B.	1	
			Pressure Spring		
5(1)		VBS0030	FE Head	1	
6(1)		VML1544	FE Lever	1	
7(1)		VMB1005	FE Lever Spring	1	
8(1)		VMD0570	Post Stopper	2	
9(1)		VXP0444	Roller Post Unit	2	
10(1)		VXA1964	Inclind Base (S) Unit	1	
11(1)		VXA1965	Inclind Base (T) Unit	1	
12(1)		VHD0133	Screw	2	
13(1)		VXA1963	Loading Base (1) Unit	1	
14(1)		VHD0045	Nut	1	
15(1)		VDP0908	Limiter Roller	1	
16(1)		VMX0288	Collar	1	
17(1)		VMX0456	Lower Limiter	1	
18(1)		VMX0663	Limiter Stand	1	
19(1)		VMB0754	P1 Spring	1	
20(1)		VMA6338	Position Adjust Hook	1	
21(1)		VMA6358	Position Plate	1	
22(1)		VMA4436	Shaft Holder Stopper	1	
23(1)		VXL0753	Loading Arm (L) Unit	1	
24(1)		VXL1152	Loading Arm (R) Unit	1	
25(1)		VMB0669	Loading Spring	2	
26(1)		VXP0520	Loading Gear Unit	2	
27(1)		VXA1966	Inclind Adjustment Plate	1	
28(1)		VHD0054	Adjustment Screw (15)	1	
29(1)		VMB0404	Adjustment Spring	1	
30(1)		VBR0233	A/C Head	1	
31(1)		VHD0089B	Azimuth Adjustment Screw	1	
32(1)		VHN0038	Nylon Nut	1	
33(1)		VXA1571	Head Base Unit	1	
34(1)		VMB1189	A/C Height Spring	1	
35(1,2)		VHN0023	M3 Nylon Nut	2	
36(1)		VMX0647	Post Sleeve	1	
37(1)		VMB1235	P4 Spring	1	
38(1)		VMA6357	Chassis Bracket	1	
39(1)		VXS0059	Earth Plate Unit	1	
40(1)		VMA6353	LED Holder Angle	1	
41(1)		VHN0031	"X" Adjustment Nut	1	
42(2)		VXL1157	Tension Arm (1) Unit	1	
43(2)		VMB1187	Tension Spring	1	
44(2)		VXZ0165	Tension Band Unit	1	
45(2)		VXR0118A	Supply Reel Table Unit	1	
46(2)		VXZ0159	Brake (S) Unit	1	
47(2)		VMB0661	Brake Arm Spring	1	
48(2)		VXR0119A	Takeup Reel Table Unit	1	
49(2)		VXZ0164	T Soft Brake (1) Unit	1	
50(2)		VMB1186	Soft Brake Spring	1	
51(2)		VXZ0161	Brake (T) Unit	1	
52(2)		VML1532	P5 Pull Out Lever	1	
53(2)		VXL1154	Pressure Roller Lever Unit	1	
54(2)		VMB1188	Pin Pressure Spring	1	
55(2)		VXL1187	P5 Arm Unit	1	
56(2)		VMB1217	P5 Spring	1	
57(2,3)		VMX0653	Cut Washer	14	
58(2)		VMB1198	S Soft Brake Spring	1	
59(2)		VXZ0166	S Soft Brake Arm Unit	1	
60(2)		VXL1169	Select Lever (A) Unit	1	
61(2)		VMB1197	Select Lever Spring	1	
62(2)		VML1533	Select Lever (B)	1	
63(2)		VMS2504	Select Lever Shaft	1	
64(2)		VXP0521	Idler Arm Unit	1	
65(2)		VXA1968	Center Base Plate	1	
66(2)		VES0243	Safety Switch Unit	1	
67(2)		VEK2054	Dew Sensor Unit	1	
68(2)		VJF0004	Wire Saddle	1	
69(2)		VXA1970	Opener Angle Unit	1	
70(2)		VDG0147	Clutch Gear	1	
71(2)		VXP0523	Clutch Gear Unit	1	
72(2)		VDP0951	Clutch Pulley	1	
73(2)		VDG0155	Intermediate Gear (B)	1	
74(2)		VMB1195	Intermediate Gear Lift	1	
			Spring		
75(2)		VDG0156	Intermediate Gear (A)	1	
76(3)		VEM0200	Loading Motor	1	⚠
77(3)		VMA6360	Loading Motor Bracket	1	
78(3)		VMX0251	Oil Seal	1	
79(3)		VMD0104	Oil Pool	1	
80(3)		VXD0087	Housing Unit	1	
81(3)		VDG0146	Intermediate Gear	1	
82(3)		VDG0151	Kick Gear	1	
83(3)		VXA1972	Kick Base (1) Unit	1	
84(3)		VDG0154	Select Gear	1	
85(3)		VXL1167	Select Gear Lever (1) Unit	1	
86(3)		VXL1168	Sector Gear Unit	1	
87(3)		VDG0145	Intermediate Gear	1	
88(3)		VDG0141	Cam Gear	1	
89(3)		VDG0143	Drive Gear (2)	1	
90(3)		VDG0142	Intermediate Pulley Gear	1	
91(3)		VDV0148	Loading Belt	1	
92(3)		VES0246	Mode Select Switch Unit	1	
93(3)		VMX0265	Thrust Washer	1	
94(3)		VXP0525	Capstan Rotor Unit	1	
95(3)		VEK2129	Capstan Stator Unit	1	⚠
96(3)		VXP0533	Capstan Pulley Unit	1	
97(3)		VDV0149	Capstan Belt	1	
98(3)		VXZ0168	Capstan Soft Brake Unit	1	
99(3)		VMB1204	Capstan Soft Brake Spring	1	
100(3)		VXA1996	Thrust Support Plate	1	
102(3)		VMX0396	Thrust Screw	1	
103(3)		VEH0213	FG Head Unit	1	
104(3)		VMX0308	Slide Washer	3	
105(3)		VMX0122	Slide Washer	3	
106(3)		VXL1158	Main Lever Unit	1	
107(3)		VMB1185	Kick Lever Spring	1	
108(3)		VMX0672	Cut Washer	1	
109(3)		VMX0644	Washer	1	
110(3)		VMB1184	Clutch Spring	1	
111(3)		VDG0153	Clutch Gear (1)	1	
112(3)		VDG0152	Clutch Gear (2)	1	
113(3)		VXL1165	Arm Lever (1) Unit	1	
114(3)		VMB1183	Sub Lever Spring	1	
115(3)		VXL1160	Sub Lever (1) Unit	1	
116(3)		VMB1192	Select Gear Lever Spring	1	
117(4)		VMA6354	Top Plate	1	
118(4)		VSM0047	Cassette In Detect Switch	1	
119(4)		VMD0580	Remains Display Board (L)	1	
120(4)		VMD0581	Remains Display Board (R)	1	
121(4)		VMB1089	Wiper Spring (L)	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
122(4)		VDG0160	Wiper Gear (L)	1	
123(4)		VML1436	Wiper Arm	1	
124(4)		VMS2305	Slider Roller Pin	2	
125(4)		VDP0839	Guide Roller	2	
126(4)		VXA1980	Side Plate (L)(1) Unit	1	
127(4)		VMS2468	Slide Roller Pin (2)	2	
128(4)		VDG0120	Intermediate Gear	2	
129(4)		VDG0157	Shaft Gear	2	
130(4)		VML1546	Front Opener Link	1	
131(4)		VMD0091	Transistor Holder	2	
132(4)		VDP0903	Wiper Roller	2	
133(4)		VDP0902	Cassette Holder Roller	2	
134(4)		VMD0452	Cassette Guide	1	
135(4)		VMD0448	Slider (L)	1	
136(4)		VMD0453	Safety Tab	1	
137(4)		VMD0577	Front Guide (L)	1	
138(4)		VMB1091	Safety Spring	1	
139(4)		VMD0454	Spring Holder	1	
140(4)		VMD0450	Slider (R)	1	
141(4)		VMD0576	Front Guide (R)	1	
142(4)		VXA1981	Side Plate (R)(1) Unit	1	
143(4)		VMS2499	Main Shaft	1	
144(4)		VKF0334	Blinder Panel	1	NV-850E(Black)/
					EG(Black)/B
144(4)		VKF0335	Blinder Panel	1	NV-850E(Silver)/
					EG(Silver)
145(4)		VMB1171	Blinder Panel Spring	1	
146(4)		VMD0455	F. Loading Motor Bracket	1	
147(4)		VDV0074	Loading Belt	1	
148(4)		VXA1754	Worm Shaft Pulley Unit	1	
149(4)		VDB0660	Worm Shaft Holder	1	
150(4)		VML1436	Wiper Arm	1	
151(4)		VDG0116	Wiper Gear (R)	1	
152(4)		VMP1090	Wiper Spring (R)	1	
153(4)		VMD0456	Stopper Ring	1	
154(4)		VDG0118	Clutch Gear	1	
155(4)		VMX0531	Clutch Spacer	1	
156(4)		VDG0117	Worm Wheel	1	
157(4)		VMB1093	Clutch Spring	1	
158(4)		VMX0530	Clutch Washer	1	
159(4)		VMA6340	Switch Bracket	1	
160(4)		VSM0046	Skeleton Switch	2	
161(5)		VSC1046	Shield Case	1	
162(5)		VJH0287	RF & ANT Board	1	
163(5)		VMA6381	RF & ANT Unit Mount Angle	1	
164(5)		VXA1987	Cassette Comp. Angle (L)	1	
165(5)		VXA1988	Cassette Comp. Angle (R)	1	
167(5)		VGQ0558	Tuner Holder	1	NV-850E/B
168(5)		VMP0370	Top Case Support Angle (A)	3	
169(5)		VKC0055	Hinge (A)	2	
170(5)		VKA0026	Rubber Foot	4	
171(5)		VYP0901	Top Panel Unit	1	NV-850E(Silver)/
					EG(Silver)
171(5)		VYP0905	Top Panel Unit	1	NV-850E(Black)/
					EG(Black)/B
171(5)		VYP0884	Top Panel Unit	1	
172(5)		VQL2266	Characteristic Sticker	1	
172(5)		VQL2242	Characteristic Sticker	1	
173(5)		VKW0280	Top Smoke Board	1	
174(5)		VYF0313	Preset Cover Unit	1	NV-850E(Silver)/
					EG(Silver)
174(5)		VYF0318	Preset Cover Unit	1	NV-850E(Black)/
					EG(Black)
174(5)		VYF0353	Preset Cover Unit	1	NV-850B

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
175(5)		VJF0004	Wire Saddle	1	
176(5)		VJF0122	Wire Saddle	1	
177(5)		VJF0022	Wire Saddle	1	
178(5)		VHD0117	Screw	4	NV-850E(Silver)/
					EG(Silver)
178(5)		VHD0143	Screw	4	NV-850E(Black)/
					EG(Black)/B
179(5)		VEJ0295	Rear Jack Unit	1	NV-850E/EG
179(5)		VEJ0313	Rear Jack Unit	1	NV-850B
181(5)		VJF0031	Wire Saddle	1	
182(5)		VMP0371	Power Transformer Angle	1	⚠
183(5)		VMT0085	Rubber Cushion	2	
184(5)		VMA6386	Earth Angle	1	
185(3,5)		VJR3	Clamper	3	
186(5)		VGH0079	Power Name Plate	1	
187(5)		VJA0111	AC Cord	1	NV-850E/EG ⚠
187(5)		VJA0112	AC Cord	1	NV-850B ⚠
188(5)		VJF0107	AC Cord Bushing	1	⚠
189(5)		VJF0139	AC Cord Clamper	1	
				1	
				1	
193(5)		VKC0102	Hinge (B)	1	
194(5)		VKC0107	Hinge (C)	1	
195(5)		VGU1027	VR Knob	3	
196(5)		VMP0403	Top Case Support Angle (B)	1	
197(5)		VHD0059	Screw	9	
198(5)		VKU0205	Bottom Plate	1	
200(5)		VGU1128	Function Select Switch	1	
201(5)		VYP0898	Front Panel Unit	1	NV-850E(Silver)
201(5)		VYP0957	Front Panel Unit	1	NV-850B
201(5)		VYP0904	Front Panel Unit	1	NV-850E(Black)
201(5)		VYP0906	Front Panel Unit	1	NV-850EG(Silver)
201(5)		VYP0907	Front Panel Unit	1	NV-850EG(Black)
202(5)		VGU1088	Memory/Reset Button	2	
203(5)		VGQ0578	Cushion	1	
204(5)		VGU1073	Audio Dub/Rec mute Button	2	
205(5)		VGU1074	Multiplex Button	4	
206(5)		VMB1043	Button Spring (A)	4	
207(5)		VGU0595	Timer Rec Button	1	
208(5)		VMB1086	Button Spring (B)	1	
209(5)		VKC0111	Latch	1	
210(5)		VYF0315	Timer Door Unit	1	NV-850E(Silver)/
					EG(Silver)
210(5)		VYF0317	Timer Door Unit	1	NV-850E(Black)/
					EG(Black)/B
211(5)		VGQ0580	Hinge (L)	1	NV-850E(Silver)/
					EG(Silver)
211(5)		VGQ0593	Hinge (R)	1	NV-850E(Black)/
					EG(Black)/B
212(5)		VGQ0579	Hinge (R)	1	NV-850E(Silver)/
					EG(Silver)
212(5)		VGQ0592	Hinge (R)	1	NV-850E(Black)/
					EG(Black)/B
213(5)		VGQ0415	Preset VR Case	1	
214(5)		VGN1993	Preset VR Plate	1	NV-850E/EG
214(5)		VGN2054	Preset VR Plate	1	NV-850B
215(6)		VSQ0327	Remote Control Unit	1	NV-850E(Silver)/
					EG(Silver)
215(6)		VSQ0338	Remote Control Unit	1	NV-850E(Black)/
					EG(Black)/B
216(6)		VQF1157	Fan Bag Kit	1	NV-850E(Silver) ⚠
216(6)		VQF1160	Fan Bag Kit	1	NV-850E(Black) ⚠

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
216(6)	VQF1159	Fan Bag Kit	1	NV-850EG(Black)⚠
216(6)	VQF1158	Fan Bag Kit	1	NV-850B ⚠
216(6)	VQF1197	Fan Bag Kit	1	NV-850EG(Silver)⚠
217(6)	VPN0958	Cushion (L)	1	
218(6)	VPN0957	Cushion (R)	1	
219(6)	VPF0144	Polyethylene Bag	1	
220(6)	VPG1572	Packing Case	1	NV-850E(Silver)
220(6)	VPG1571	Packing Case	1	NV-850E(Black)
220(6)	VPG1619	Packing Case	1	NV-850EG(Silver)
220(6)	VPG1574	Packing Case	1	NV-850EG(Black)
220(6)	VPG1573	Packing Case	1	NV-850B
221(6)	VJA0231	Audio Cable	2	
222(6)	VJA0130	DIN RF Cable	1	
229(4)	VGQ0571	Spacer	2	
230(5)	VKC0076	Hinge(D)	2	
231(1)	VMD0369	Wire Holder	1	
232(4)	VXA2054	Cassette Holder (1) Unit	1	
233(3)	VMT0101	Stopper Cushion	1	
234(3)	VHD0146	Screw	1	
235(5)	VMP0419	Decoder P.C.B. Holder	1	
236(1)	VXA2006	Stator Angle Unit	1	
237(1)	VXA2004	RT Rotor Base Unit	1	
239(5)	VKC0083	Hinge (E)	1	
240(4)	MXN12AE10C	Front Loading Motor	1	⚠
241(5)	VMG0272	RF Converter Bushing	1	
242(5)	VMX0573	Spacer	8	
243(5)	VMX0237	AC Cord Cover	1	⚠
244(5)	VMZ0562	Barrier	1	⚠
245(5)	VSC1064	Power Heat Sink	1	
246(5)	VMB0758	Tr. Clamper	1	
247(5)	VKC0109	Hinge (F)	2	
248(5)	VJF0175	P.C. Board Supporter	1	
249(5)	VKC0068	Hinge (G)	2	
250(5)	VJF0108	Rivet	2	
251(5)	VXA2062	Barrier	1	
252(5)	VTP0105	Power Transformer	1	NV-850E/EG ⚠
252(5)	VTP0104	Power Transformer	1	NV-850B ⚠
261(7)	VYK0655	Top Case Unit	1	NV-850E(Silver)/ EG(Silver)
261(7)	VYK0657	Top Case Unit	1	NV-850E(Black)/ EG(Black)/B
262(7)	VJR0101	Electrode (Common)	1	
263(7)	VJR0100	Electrode (-)	1	
264(7)	VJR0099	Electrode (+)	1	
265(7)	VGU1204	Play Button	1	NV-850E(Silver)/ EG(Silver)

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
265(7)	VGU1288	Play Button	1	NV-850E(Black)/ EG(Black)/B
266(7)	VGU1205	Stop Button	1	NV-850E(Silver)/ EG(Silver)
266(7)	VGU1289	Stop Button	1	NV-850E(Black)/ EG(Black)/B
267(7)	VGU1209	FF Button	1	NV-850E(Silver)/ EG(Silver)
267(7)	VGU1293	FF Button	1	NV-850E(Black)/ EG(Black)/B
268(7)	VGU1208	Rew Button	1	NV-850E(Silver)/ EG(Silver)
268(7)	VGU1292	Rew Button	1	NV-850E(Black)/ EG(Black)/B
269(7)	VGU1207	F. Adv Button	1	NV-850E(Silver)/ EG(Silver)
269(7)	VGU1291	F. Adv Button	1	NV-850E(Black)/ EG(Black)/B
270(7)	VGU1206	Still Button	1	NV-850E(Silver)/ EG(Silver)
270(7)	VGU1290	Still Button	1	NV-850E(Black)/ EG(Black)/B
272(7)	VGU2212	Rec Button A (Red)	1	
273(7)	VGU2211	CH Select & Rec B Button	1	NV-850E(Silver)/ EG(Silver)
273(7)	VGU1335	CH Select & Rec B Button	1	NV-850E(Black)/ EG(Black)/B
274(7)	VGU2213	Power Button	1	
275(7)	VGU0656	Button Holder	1	
276(7)	VGU1210	VTR Button	1	NV-850E(Silver)/ EG(Silver)
276(7)	VGU1294	VTR Button	1	NV-850E(Black)/ EG(Black)/B
277(7)	VSP0150	Rubber Contact	1	
278(7)	VKF0340	Battery Cover	1	
279(7)	VKW0297	Smoke Board	1	
280(7)	VYK0656	Bottom Case Unit	1	NV-850E(Silver)/ EG(Silver)
280(7)	VYK0658	Bottom Case Unit	1	NV-850E(Black)/ EG(Black)/B
281(7)	XTB2+5G	Screw	1	
		Screws		
401(1)	XYNV3+B8BNS		2	
402(1)	XTN26+6G		1	
403(1)	XYE3+BF15FZ		4	
404(1)	XYN3+F8FZS		2	
405(1,2,3,4,5)	XTV3+8F		23	
406(1)	XSS26+6		1	
407(1,3,4,5)	XTV3+6F		7	
408(1)	XYN3+F6FZS		1	
409(1,4)	XYN3+C4S		3	
410(1)	XSN3D10FZS		1	
411(1,3)	XTV3+8FFZ		3	
412(1)	XYN3+C8S		3	
413(2,4)	XYE3+EF8		1	
414(2)	XYE3+BF9FZ		2	
416(3)	XYE3+BF8FZ		1	
417(4)	XTS3+8F		4	
418(4)	XTB3+8GK		4	
419(4)	XTB3+8FK		6	
420(4)	XYE3+FE6		1	
421(4)	XYN2+F10		2	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
422(1,5)		XTV3+8JR		5	
423(5)		XYN3+F8RS		4	
424(5)		XTV3+10GR		13	
425(5)		XTV4+30A		3	
426(5)		XTV3+8G		2	
427(5)		XTV3+10JFZ		4	
428(5)		XSB3+8FZS		2	
429(5)		XTV4+15A		1	
430(5)		XTV3+8JZF		2	
431(5)		XTW3+8PR		3	
432(4)		XTV3+8FR		1	
433(4)		XYE3+EF10		2	
434(5)		XTS23+6J		2	
435(5)		XTV3+10G		1	
436(5)		XTV3+8F		1	
437(5)		XTV3+8J		8	
438(5)		XTV3+8GR		2	
439(1)		XYN3+A14		2	
440(1)		EYN3+C10		2	
			Washers & Rings		
501(1,2,3)		XUEV4VW		14	
502(1)		XWE5		1	
503(2,3)		XUEV3VW		7	
504(2,3)		XWGV3D7G		10	
505(2)		XWGV6F9G		1	
506(2,3,4)		XWGV4D9G		6	
507(2)		XUC15FP		1	
508(2)		XWGV3D12G		1	
509(3)		XWGV4D11G		3	
510(4)		XUC3FP		7	
511(4)		XUC25FP		3	
512(2)		XWGV3D8G		2	
513(3)		XWGV3Y6G		2	
514(2)		XWGV3D54G		2	
515(3)		XWGV5Y9G		1	
516(4)		XWGV3F6G		1	

4-4. ELECTRICAL REPLACEMENT PARTS LIST

Notes: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified by ⚠ have special characteristics important for safety. When replacing any of these components, use only the original ones.
3. Unless otherwise specified,
All resistors are in OHMS (Ω), 1/4W±5% carbon. K=1,000Ω, M=1,000KΩ. All capacitors are in MICROFARADS (μF), ±10% P=μμF.

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		VEP03197A	Main [Power Supply, Servo, Luminance (1), Chrominance, Audio & System Control] P.C. Board Unit	1	NV-850EG⚠
		VEP03197B	Main [Power Supply, Servo, Luminance (1), Chrominance, Audio & System Control] P.C. Board Unit	1	NV-850B⚠
		VEP03197C	Main [Power Supply, Servo, Luminance (1), Chrominance, Audio & System Control] P.C. Board Unit	1	NV-850E⚠
		VEP05053A	Head Amp & Luminance (2) P.C. Board Unit	1	
		VEP06212A	Operation P.C. Board Unit	1	
		VEP07186G	TV Demodulator P.C. Board Unit	1	NV-850E⚠
		VEP07186H	TV Demodulator P.C. Board Unit	1	NV-850B⚠
		VEP07193A	TV Demodulator P.C. Board Unit	1	NV-850EG⚠
		VEP07194A	Decoder P.C. Board Unit	1	NV-850EG
		VEP07195A	Timer P.C. Board Unit	1	NV-850E/EG
		VEP07195B	Timer P.C. Board Unit	1	NV-850B
		VEP07196A	Timer Operation P.C. Board Unit	1	NV-850E/EG
		VEP07196B	Timer Operation P.C. Board Unit	1	NV-850B
		VEP00A99A	FM Aduio Main P.C. Board Unit	1	
		VEP00B01A	FM Audio Sub P.C. Board Unit	1	NV-850EG
		VEP00B01B	FM Audio Sub P.C. Board Unit	1	NV-850B
		VEP00B01C	FM Audio Sub P.C. Board Unit	1	NV-850E
		ENC87751	RF Converter Unit	1	NV-850E/EG⚠
		ENC87752	RF Converter Unit	1	NV-850B⚠

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		VJB00A53	Reel Sensor P.C. Board	1	
		VJB00A54	Loading Motor Connection P.C. Board	1	
		VJB00A55	Front Connection P.C. Board	1	
		VJB00A56	Takeup Photo Transistor P.C. Board	1	
		VJB00A82	F. Loading Motor Connection P.C. Board	1	
		VJB00A94	Supply Photo Transistor P.C. Board	1	
		VJB00A98	Rear Jack P.C. Board	1	
		VJB00B45	Heater Transformer P.C. Board	1	
		VJB00B46	Power Transistor P.C. Board	1	
		VJB00B47	Head Phone P.C. Board	1	
		VJB00B64	IR Remote Control Reciever P.C. Board	1	
		VJB00B78	Cylinder Heater P.C. Board	1	
		VJB00976	Sensor LED P.C. Board	1	
		VJB01137	Power Transformer P.C. Board	1	⚠
		VJB00C08	IR Remote Control Transmitter P.C. Board	1	
		VTP0105	Power Transformer	1	NV-850E/EG⚠
		VTP0104	Power Tansformer	1	NV-850B⚠
		VMZ0562	Barrier	1	⚠
		XTV4+8F	Screw	1	
		VJF0052	Binder	5	
		VJF0055	Binder	6	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
	VEP03197A/	Main[Power Supply,Servo,		
	B/C	Luminance (1),		
		Chrominance, Audio &		
		System Control]P.C.Board		
		Unit		
		(Power Supply Section)		
		Transistors		
Q1001	2SD636		1	(Q,R,S,T) or 2SC2021M
				(Q,R,S,E)
Q1003	2SD636		1	(Q,R,S,T) or 2SC2021M
				(Q,R,S,E)
Q1102	2SD1265		1	⚠
		Diodes		
D1002	RD3.9EB1	Zener	1	
D1003,1004	MA165		2	
D1110	RD13EB3	Zener	1	
		Resistors		
R1001	ERQ14LKR39	Metal 0.39	1	⚠
R1002	ERDS2TJ471	470	1	
R1003	EVN38CA00B53	Variable 5K	1	
R1004	ERDS2TJ392	3.9K	1	
R1005	EROS2CKG3901	Metal 3.9K	1	
R1006	EROS2CKG3001	Metal 3K	1	
R1007	ERDS2TJ103	1K	1	
R1008	ERDS2TJ682	6.8K	1	
R1009	ERDS2TJ472	4.7K	1	
R1010	EROS2CKG1800	Metal 180	1	
R1102	ERDS2TJ152	1.5K	1	
		Capacitors		
C1002	ECEA0JK470	Electrolytic 6.3V 47	1	
C1003	ECEA1HU470	Electrolytic 50V 47	1	or ECEA1HS470
C1104	ECEA1CK470	Electrolytic 16V 47	1	
C1004	ECEA0JU470	Electrolytic 6.3V 47	1	
		(Servo Section)		
		Integrated Circuits		
IC2001	AN6359N		1	
IC2002	MN6168VIF		1	
IC2003	AN6356N		1	
IC2004	AN3822		1	
IC2005	AN6387		1	
IC2007	BA855		1	
IC2008	AN6342N		1	
IC2009	BA6323L		1	
IC2010	µPC358C		1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Transistors		
Q2001,2002	2SD636		2	(P,Q,R,S,T)
				or 2SC2021M(Q,R,S,E)
Q2003	2SB641		1	(P,Q,R,S)
				or 2SA937M(Q,R,S)
Q2004	2SD636		1	(P,Q,R,S,T)
				or 2SC2021M (Q,R,S,E)
Q2005	2SB641		1	(P,Q,R,S)
				or 2SA937M (Q,R,S)
Q2006	2SD636		1	(P,Q,R,S,T)
				or 2SC2021M(Q,R,S,E)
		Combination Parts		
		(Transistor & Resistor)		
QR2001-2003	DTC144A		3	or UN1213
QR2004	DTA144A		1	or UN1113
QR2006,2007	DTC144A		2	or UN1213
QR2008,2009	DTA144A		2	or UN1113
QR2010	DTC144A		1	or UN1213
		Diodes		
D2001,2002	MA165		2	
D2003	10E1		1	or ERB1201G1
D2004	MA154WK		1	
D2005-2007	MA165		3	
D2009-2014	MA165		6	
		Resistors		
R2001	ERDS2TJ223	22K	1	
R2002	ERDS2TJ272	2.7K	1	
R2003	ERDS2TJ472	4.7K	1	
R2004	ERDS2TJ154	150K	1	
R2005	ERDS2TJ333	33K	1	
R2006	ERDS2TJ154	150K	1	
R2007	ERDS2TJ332	3.3K	1	
R2008	ERDS2TJ124	120K	1	
R2009	ERDS2TJ154	150K	1	
R2010	ERDS2TJ563	56K	1	
R2011	ERDS2TJ103	10K	1	
R2012	ERDS2TJ274	270K	1	
R2013	ERDS2TJ682	6.8K	1	
R2014	ERDS2TJ222	2.2K	1	
R2015	EVJ1EAF20B15	Variable 100K	1	
R2016	EVN61AA00B15	Variable 100K	1	
R2017	ERDS2TJ102	1K	1	
R2018	EVN61AA00B54	Variable 50K	1	
R2019	ERDS2TJ153	15K	1	
R2020	ERDS2TJ223	22K	1	
R2021	ERDS2TJ391	390	1	
R2022	ERDS2TJ563	56K	1	
R2023	ERDS2TJ473	47K	1	
R2024,2025	ERDS2TJ223	22K	2	
R2026	ERDS2TJ104	100K	1	
R2027	ERDS2TJ393	39K	1	
R2028	ERDS2TJ124	120K	1	
R2029	ERDS2TJ222	2.2K	1	
R2030,2031	ERDS2TJ103	10K	2	
R2032	ERDS2TJ562	5.6K	1	
R2033	ERDS2TJ103	10K	1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
R2034	ERDS2TJ105	1M	1	
R2035	ERX12ANJR82	Metal 1/2W 0.82	1	
R2036	ERDS2TJ102	1K	1	
R2037	ERDS2TJ103	10K	1	
R2038-2040	ERDS2TJ224	220K	3	
R2041	ERDS2TJ181	180	1	
R2042	ERDS2TJ104	100K	1	
R2043	ERDS2TJ124	120K	1	
R2044	ERX12ANJR68	Metal 1/2W 0.68	1	
R2045-2047	ERDS2TJ150	15	3	
R2049	ERQ12HJ6R8	Metal 1/2W 6.8	1	⚠
R2050	ERDS2TJ563	56K	1	
R2055	ERDS2TJ105	1M	1	
R2056	ERDS2TJ183	18K	1	
R2057	ERDS2TJ103	10K	1	
R2058	ERDS2TJ333	33K	1	
R2059	ERDS2TJ102	1K	1	
R2060	ERDS2TJ472	4.7K	1	
R2063	ERDS2TJ102	1K	1	
R2064	ERDS2TJ184	180K	1	
R2065	ERDS2TJ473	47K	1	
R2066	EVN61AA00B54	Variable 50K	1	
R2067	ERDS2TJ184	180K	1	
R2068	ERDS2TJ154	150K	1	
R2069	ERDS2TJ683	68K	1	
R2070	ERDS2TJ184	180K	1	
R2071	EROS2CKG5102	Metal 51K	1	
R2072	EVTK4CA00B15	Variable 100K	1	
R2073	EVN3ACA00B54	Variable 50K	1	
R2074	ERDS2TJ563	56K	1	
R2075	ERDS2TJ151	150	1	
R2076	ERDS2TJ153	15K	1	
R2077	ERDS2TJ222	2.2K	1	
R2078	ERDS2TJ223	22K	1	
R2079,2080	ERDS2TJ563	56K	2	
R2081	ERDS2TJ273	27K	1	
R2082	ERDS2TJ223	22K	1	
R2083	EROS2CKG3002	Metal 30K	1	
R2084	ERDS2TJ102	1K	1	
R2085	EVN61AA00B15	Variable 100K	1	
R2087	ERDS2TJ102	1K	1	
R2088	ERDS2TJ562	5.6K	1	
R2089	ERDS2TJ472	4.7K	1	
R2090	ERDS2TJ564	560K	1	
R2091	ERDS2TJ561	560	1	
R2092	ERDS2TJ104	100K	1	
R2093	ERDS2TJ105	1M	1	
R2094	ERDS2TJ102	1K	1	
		Capacitors		
C2001	ECQV1H104JZ	Mylar 50V 0.1	1	
C2003	VCYG1E562JR	Semiconductor 25V 5600P	1	
C2004	ECEA1HK0R1	Electrolytic 50V 0.1	1	
C2005	ECQB1H223KH	Mylar 50V 0.022	1	
C2006	ECEA0JK101	Electrolytic 6.3V 100	1	
C2007	VCYG1E562JR	Semiconductor 25V 5600P	1	
C2008	ECEA1HK0R1	Electrolytic 50V 0.1	1	
C2009	ECEA0JK330	Electrolytic 6.3V 33	1	
C2010	ECEA1HK010	Electrolytic 50V 1	1	
C2011	ECQV1H334JZ	Mylar 50V 0.33	1	
C2012	ECQV1H683JZ	Mylar 50V 0.068	1	
C2013	ECKF1H472ZF	Ceramic 50V 4700P	1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
C2014,2015	ECEA1CK100	Electrolytic 50V 10	2	
C2016	ECEA0JK470	Electrolytic 6.3V 47	1	
C2017	ECEA10Z100	Electrolytic 10V 10	1	
C2018	ECQV1H104JZ	Mylar 50V 0.1	1	
C2019	ECEA0JK101	Electrolytic 6.3V 100	1	
C2020	ECQV1H104JZ	Mylar 50V 0.1	1	
C2021	ECEA1HK010	Electrolytic 50V 1	1	
C2022-2024	ECKF1H272KB	Ceramic 50V 2700P	3	
C2025-2027	ECEA1EK4R7	Electrolytic 25V 4.7	3	
C2028	ECKF1H222KB	Ceramic 50V 2200P	1	
C2029	VCYG1E682JR	Semiconductor 25V 6800P	1	
C2030	ECKF1H103ZF	Ceramic 50V 0.01	1	
C2031	ECEA1HKR22	Electrolytic 50V 0.22	1	
C2032	VCYG1E123JR	Semiconductor 25V 0.012	1	
C2033	ECEA1EK3R3	Electrolytic 25V 3.3	1	
C2034	ECEA1CK470UJ	Electrolytic 16V 47	1	
C2035-2037	ECEA1EN4R7SE	Electrolytic 25V 4.7	3	
C2038	ECEA1HKN010	Electrolytic 50V 1	1	
C2039	ECKF1H152KB	Ceramic 50V 1500P	1	
C2040	ECEA1HK0R1	Electrolytic 50V 0.1	1	
C2041	ECQB1H222KH	Mylar 50V 2200P	1	
C2042	ECKF1H103ZF	Ceramic 50V 0.01	1	
C2046	ECEA1EKN2R2	Electrolytic 25V 2.2	1	
C2047	ECEA1HK010	Electrolytic 50V 1	1	
C2048	ECEA1CK100	Electrolytic 16V 10	1	
C2049	VCYG1E103JR	Semiconductor 25V 0.01	1	
C2050	VCYG1E123JR	Semiconductor 25V 0.012	1	
C2051	ECQV1H104JZ	Mylar 50V 0.1	1	
C2052	ECEA0JK470	Electrolytic 6.3V 47	1	
C2053	VCYG1E682JR	Semiconductor 25V 6800P	1	
C2054	ECEA16Z10	Electrolytic 16V 10	1	
C2055	VCYG1E103JR	Semiconductor 25V 0.01	1	
C2056,2057	ECQV1H124JZ	Mylar 50V 0.12	2	
C2058	ECQV1H154JZ	Mylar 50V 0.15	1	
C2059	ECQV1H124JZ	Mylar 50V 0.12	1	
C2060	ECQB1H272KH	Mylar 50V 2700P	1	
C2061	ECQB1H822KH	Mylar 50V 8200P	1	
C2062	ECQB1H682KH	Mylar 50V 6800P	1	
C2063	VCYG1E103JR	Semiconductor 25V 0.01	1	
C2064	ECEA1CK100	Electrolytic 16V 10	1	
C2065	VCYG1E103JR	Semiconductor 25V 0.01	1	
C2066	ECEA1HK010	Electrolytic 50V 1	1	
C2067	ECQB1H103KH	Mylar 50V 0.01	1	
C2068	ECQV1H104JZ	Mylar 50V 0.1	1	
C2069,2070	ECEA0JK101	Electrolytic 6.3V 100	2	
C2071	ECEA1CK470	Electrolytic 16V 47	1	
C2072	ECEA0JK101	Electrolytic 6.3V 100	1	
C2073	ECEA1EU470	Electrolytic 25V 47	1	or ECEA1ES470
		Combination Circuits		
		(Capacitor & Resistor)		
CR2001	EXED472M104T	4700P, 100K	1	
CR2002	EXED223M222T	0.022, 2.2K	1	
		(Luminance (1) Section)		
		Integrated Circuits		
IC3001	BA7004		1	
IC3050	AN6328		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Transistors		
Q3001		2SC2206		1	
Q3002		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q3004		2SB641		1	(P,Q,R,S,T) NV-850E/EG
Q3005		2SD636		1	(P,Q,R,S,T) NV-850E/EG
Q3006		2SD638		1	(P,Q,R,S,T) NV-850E/EG
			Combination Parts		
			(Transistor & Resistor)		
QR3001		DTC124A		1	or UN1212 NV-850E/EG
QR3002		DTC114A		1	NV-850E/EG
QR3003		DTC124A		1	or UN1212 NV-850E/EG
QR3050		DTC124A		1	or UN1212
			Diodes		
D3001		MA154WK		1	
D3002		MA165		1	
D3003		MA154WK		1	
D3004,3005		MA165		2	
D3006-3008		MA165		3	
D3009-3012		MA165		4	
D3013		MA165		1	NV-850B
D3014		MA165		1	
			Resistors		
R3001		ERDS2TJ103	10K	1	
R3002		ERDS2TJ392	3.9K	1	
R3003		ERDS2TJ152	1.5K	1	
R3004		ERDS2TJ102	1K	1	
R3005		ERDS2TJ331	330	1	
R3006		ERDS2TJ103	10K	1	
R3007		ERDS2TJ223	22K	1	
R3008		ERDS2TJ822	8.2K	1	
R3009,3010		ERDS2TJ102	1K	2	
R3011		ERDS2TJ152	1.5K	1	
R3012		ERDS2TJ561	560	1	
R3013		ERDS2TJ102	1K	1	
R3015		ERDS2TJ750	75	1	
R3017		ERDS2TJ750	75	1	
R3018		EVJ1EAF20B23	Variable 2K	1	
R3019		ERDS2TJ103	1K	1	
R3020		ERDS2TJ333	33K	1	NV-850E/EG
R3024		ERDS2TJ181	180	1	NV-850E/EG
R3025		ERDS2TJ820	82	1	NV-850E/EG
R3026		ERDS2TJ563	56K	1	NV-850E/EG
R3029		ERDS2TJ822	8.2K	1	NV-850E/EG
R3030		ERDS2TJ222	2.2K	1	NV-850E/EG
R3031		ERDS2TJ472	4.7K	1	NV-850E/EG
R3032		ERDS2TJ332	3.3K	1	NV-850E/EG
R3033		ERDS2TJ821	820	1	NV-850E/EG
R3034		ERDS2TJ180	18	1	NV-850E/EG
R3035		ERDS2TJ391	390	1	NV-850E/EG
R3036		ERDS2TJ681	680	1	
R3037		ERDS2TJ271	270	1	
R3051		ERDS2TJ101	100	1	
R3052		ERDS2TJ122	1.2K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R3053		ERDS2TJ560	56	1	
R3054		ERDS2TJ680	68	1	
R3055		ERDS2TJ122	1.2K	1	
R3056		EVN61AA00B23	Variable 2K	1	
R3057		ERDS2TJ182	1.8K	1	
R3058		ERDS2TJ121	120	1	
R3059		ERDS2TJ471	470	1	
R3060		ERDS2TJ821	820	1	
R3061		ERDS2TJ102	1K	1	
R3062		ERDS2TJ391	390	1	
R3063		ERDS2TJ122	1.2K	1	
			Capacitors		
C3001		ECEA1CK100	Electrolytic 16V 10	1	
C3002		ECEA1CK470	Electrolytic 16V 47	1	
C3003		ECEA1AU331	Electrolytic 10V 330	1	or ECEA1AS331
C3004		ECEA1AKN470	Electrolytic 10V 47	1	
C3005,3006		ECEA1CK100	Electrolytic 16V 10	2	
C3007,3008		VCYG1E332KR	Semiconductor 25V 3300P	2	
C3009		ECCF1H390KC	Ceramic 50V 39P	1	
C3020		ECEA1CK330	Electrolytic 16V 33	1	NV-850E/EG
C3023		ECEA1CK330	Electrolytic 16V 33	1	NV-850E/EG
C3024		ECEA1CU101	Electrolytic 16V 100	1	or ECEA1CS101
					NV-850E/EG
C3026		ECQV1H274JZ	Mylar 50V 0.27	1	NV-850E/EG
C3051		ECEA1AK470	Electrolytic 10V 47	1	
C3052		ECEA1HK010	Electrolytic 50V 1	1	
C3053		ECEA1HKN010	Electrolytic 50V 1	1	
C3054		ECEA1HKN010	Electrolytic 50V 1	1	
C3055		ECKF1H122KB	Ceramic 50V 1200P	1	
C3056		ECEA1AK470	Electrolytic 10V 47	1	
C3057		ECKF1H391KB	Ceramic 50V 390P	1	
C3058		ECCF1H680J	Ceramic 50V 68P	1	
C3059		ECKF1H331KB	Ceramic 50V 330P	1	
C3060		ECKF1H151KB	Ceramic 50V 150P	1	
C3061		ECCF1H820KC	Ceramic 50V 82P	1	
C3062,3063		ECKF1H103ZF	Ceramic 50V 0.01	2	
C3065		VCKG1H561JA	Semiconductor 50V 560P	1	
C3066		ECEA1AU221	Electrolytic 10V 220	1	or EEA1AS221
C3067		ECCF1H470JC	Ceramic 50V 47P	1	
C3068		ECCF1H330JC	Ceramic 50V 33P	1	
C3069		ECKF1H391KB	Ceramic 50V 390P	1	
			Coils		
L3001,3002		VLQEL05F101K	100μH	2	
L3003		VLQEL05F101K	100μH	1	NV-850E/EG
L3051		VLQEL05F101K	100μH	1	
L3052		VLQEL05F6R8K	6.8μH	1	
L3053		VLQEL05F330K	33μH	1	
L3054		VLQEL05F680K	68μH	1	
L3055		VLQEL05F101K	100μH	1	
L3056		VLQEL05F680K	68μH	1	
L3057		VLQEL05F180K	18μH	1	
			Filter		
FL3001		VLF0188		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Crystal Oscillator		
X3001		VSX0099		1	
			Switch		
S3001		VSS0095		1	
			(Audio Section)		
			Integrated Cricuits		
IC4001		TA7355P		1	
IC4002		µPC1514CA		1	
IC4101		AN6262		1	
			Transistors		
Q4001		2SD639		1	(R)
Q4002		2SD655		1	(E) or (F)
Q4101		2SB745		1	(R,S,T)
Q4102		2SD636		1	(P,Q,R,S,T)
Q4105		2SD636		1	(P,Q,R,S,T)
Q4106		2SD639		1	(R)
Q4107		2SD655		1	(E,F)
			Combination Circuits		
			(Transistor & Resistor)		
QR4103,4104		DTC124A		2	or UN1212
			Diodes		
D4101,4102		MA165		2	
			Resistors		
R4001		ERDS2TJ104	100K	1	
R4002		ERDS2TJ331	330	1	
R4003		ERDS2TJ124	120K	1	
R4004		ERDS2TJ332	3.3K	1	
R4005		ERDS2TJ100	10	1	
R4006		EVN61AA00B13	Variable 1K	1	
R4007		ERDS2TJ103	10K	1	
R4008		ERDS2TJ473	47K	1	
R4009		ERDS2TJ222	2.2K	1	
R4011		ERDS2TJ123	12K	1	
R4012		ERDS2TJ103	10K	1	
R4013		ERDS1TJ335S	1/2W 3.3M	1	
R4014		ERDS2TJ221	220	1	
R4015		ERDS2TJ472	4.7K	1	
R4016		ERDS2TJ182	1.8K	1	
R4017		ERDS2TJ153	15K	1	
R4018		EVN61AA00B15	Variable 100K	1	
R4019		ERDS2TJ223	22K	1	
R4021		ERDS2TJ102	1K	1	
R4023		ERDS2TJ561	560	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R4101		ERDS2TJ472	4.7K	1	
R4102		ERDS2TJ104	100K	1	
R4103		ERDS2TJ333	33K	1	
R4104		ERDS2TJ104	100K	1	
R4105		ERDS2TJ221	220	1	
R4106		ERDS2TJ223	22K	1	
R4107		ERDS2TJ103	10K	1	
R4108		ERDS2TJ473	47K	1	
R4109		ERDS2TJ332	3.3K	1	
R4112		EVK06F025B53	Variable 5K	1	
R4113		ERDS2TJ102	1K	1	
R4114		ERDS2TJ332	3.3K	1	
R4115		ERDS2TJ562	5.6K	1	
R4116		ERDS2TJ102	1K	1	
R4117		ERDS2TJ332	3.3K	1	
R4118		ERDS2TJ562	5.6K	1	
R4119,4120		ERDS2TJ102	1K	2	
R4121		ERDS2TJ224	220K	1	
R4122		ERDS2TJ223	22K	1	
R4123		ERDS2TJ473	47K	1	
R4124		ERDS2TJ223	22K	1	
R4125		ERDS2TJ333	33K	1	
R4126		ERDS2TJ102	1K	1	
R4128		ERDS2TJ102	1K	1	
R4129		ERDS2TJ473	47K	1	
			Capacitors		
C4001		ECEA1CK100	Electrolytic 16V 10	1	
C4002		ECEA1AU221	Electrolytic 10V 220	1	or ECA1AS221
C4003		ECQB1H102KH	Mylar 50V 1000P	1	
C4004		ECEA1CK100	Electrolytic 16V 10	1	
C4005		ECEA1AK330	Electrolytic 10V 33	1	
C4006		ECQB1H333KH	Mylar 50V 0.033	1	
C4008		ECEA1HK010	Electrolytic 50V 1	1	
C4009		ECEA1AK330	Electrolytic 10V 33	1	
C4010		ECEA1CK100	Electrolytic 16V 10	1	
C4011		ECEA0JK470	Electrolytic 6.3V 47	1	
C4012		ECQM1H223KH	Mylar 50V 0.022	1	
C4013		VCYG1E153KX	Semiconductor 25V 0.015	1	
C4014		ECKF1H472ZF	Ceramic 50V 4700P	1	
C4015		ECQF6222KZ	Mylar 630V 2200P	1	
C4016		ECEA1CK100	Electrolytic 16V 10	1	
C4017		ECCD2H181K	Ceramic 500V 180P	1	
C4018		ECQV1H683JZ	Mylar 50V 0.068	1	
C4019		ECEA1CU101	Electrolytic 16V 100	1	or ECA1CS101
C4020		ECEA1CU221	Electrolytic 16V 220	1	or ECA1CS221
C4021		ECQB1H103KH	Mylar 50V 0.01	1	
C4022		ECQB1H273KH	Mylar 50V 0.027	1	
C4023		ECQB1H103KH	Mylar 50V 0.01	1	
C4101		ECEA1CK100	Electrolytic 16V 10	1	
C4102		ECEA1CU101	Electrolytic 16V 100	1	or ECA1CS101
C4103		ECKF1H102KB	Ceramic 50V 1000P	1	
C4104		ECEA1AK330	Electrolytic 10V 33	1	
C4105		ECEA1CK100	Electrolytic 16V 10	1	
C4106		ECEA1EN3R3	Electrolytic 25V 3.3	1	
C4107		ECOB1H153JH	Mylar 50V 0.015	1	
C4108		VCYG1E153KR	Semiconductor 25V 0.015	1	
C4109		ECQM2223KZ	Mylar 200V 0.022	1	
C4110		VCYG1E333KR	Semiconductor 25V 0.033	1	
C4111		ECEA16Z10	Electrolytic 16V 10	1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Coils		
L4001	VTQ0014	10mH	1	
L4002	VLQEL05F471K	470μH	1	
L4003,4004	VTQ0014	10mH	2	
L4101	VLQEL06F471K	470μH	1	
		Transformers		
T4101	EIQ7QF002B		1	or VLT0202
T4102	EIQ7QF003B		1	or VLT0201
		(System Control Section)		
		Integrated Circuits		
IC6001	MN15342VGC-3		1	
IC6002,6003	BA6209		2	
IC6004	AN6914		1	
		Transistors		
Q6001,6002	2SD636		2	(P,Q,R,S,T)
				or 2SC2021M(Q,R,S,E)
Q6003	2SB819		1	(R,S)
Q6005	2SA719		1	(R,S)
Q6006	2SB641		1	(P,Q,R,S)
				or 2SA937M (Q,R,S)
Q6007	2SA719		1	(P,Q,R,S)
Q6008	2SB641		1	(P,Q,R,S)
				or 2SA937M(Q,R,S)
Q6009	2SA719		1	(P,Q,R,S)
Q6012	2SD636		1	(P,Q,R,S,T)
		Combination Circuits		
		(Transistor & Resistor)		
QR6001	DTC124A		1	or UN1212
QR6002,6003	DTC114A		2	or UN1211
QR6004	DTC114A		1	or UN1211
QR6005,6006	DTC124A		2	or UN1112
QR6008	DTA124A		1	or UN1112
QR6012,6013	DTC144A		2	or UN1213
		Diodes		
D6005	MA165		1	
D6007,6008	MA165		2	
D6011-6016	MA165		6	
D6022	MA165		1	
D6024	MA165		1	
D6029,6030	MA165		2	
D6039	MA165		1	
D6043	MA154WK		1	
D6055-6057	MA165		3	
D6058,6059	MA165		2	NV-850E/EG
D6060,6061	MA165		2	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Resistors		
R6001	ERG1ANJ680	Metal 1W 68	1	
R6002	ERDS2TJ220	22	1	
R6003	ERDS2TJ681	680	1	
R6004	ERDS2TJ332	3.3K	1	
R6005,6006	ERDS2TJ681	680	2	
R6007	ERDS2TJ332	3.3K	1	
R6008,6009	ERDS2TJ103	10K	2	
R6010	ERDS2TJ152	1.5K	1	
R6011	ERDS2TJ102	1K	1	
R6012	ERDS2TJ682	6.8K	1	
R6013	ERDS2TJ563	56K	1	
R6014	ERDS2TJ222	2.2K	1	
R6015	ERDS2TJ153	15K	1	
R6016	ERDS2TJ103	10K	1	
R6017	ERDS2TJ333	33K	1	
R6019	ERDS2TJ103	10K	1	
R6021	ERDS2TJ105	1M	1	
R6022	ERDS2TJ474	470K	1	
R6023	EROS2CKG2261	Metal 2260	1	
R6024	EROS2CKG1542	Metal 15.4K	1	
R6025	EROS2CKG1212	Metal 12.1K	1	
R6026	ERDS2TJ103	10K	1	
R6027	ERDS2TJ562	5.6K	1	
R6028	ERDS2TJ682	6.8K	1	
R6029	ERDS2TJ103	10K	1	
R6030	ERDS2TJ152	1.5K	1	
R6033	ERDS2TJ682	6.8K	1	
R6034	ERDS2TJ562	5.6K	1	
R6035	ERDS2TJ332	3.3K	1	
R6036	ERDS2TJ682	6.8K	1	
R6037	ERDS2TJ562	5.6K	1	
R6038,6039	ERDS2TJ103	10K	2	
R6040,6041	ERDS2TJ105	1M	2	
R6043	ERDS2TJ332	3.3K	1	
R6047	ERDS2TJ333	33K	1	
R6048	ERDS2TJ560	56	1	
R6050	ERDS2TJ391	390	1	
R6051	ERDS2TJ333	33K	1	
R6052	ERDS2TJ223	22K	1	
R6053	ERDS2TJ182	1.8K	1	
R6054	ERDS2TJ223	22K	1	
R6055	ERDS2TJ822	8.2K	1	
R6056-6059	ERDS2TJ223	22K	4	
R6068,6069	ERDS2TJ223	22K	2	
R6070	ERDS2TJ562	5.6K	1	
R6077	ERDS2TJ682	6.8K	1	
R6078	ERDS2TJ333	33K	1	
R6081	ERDS2TJ123	12K	1	
R6082	ERDS2TJ473	47K	1	
R6083	ERDS2TJ222	2.2K	1	
R6085	ERDS2TJ683	68K	1	NV-850E/EG
R6086	ERDS2TJ332	3.3K	1	NV-850E/EG
		Capacitors		
C6001	ECQB1H472KH	Mylar 50V 4700P	1	
C6002	ECKF1H681KB	Ceramic 50V 680P	1	
C6003,6004	ECKF1H103ZF	Ceramic 50V 0.01	2	
C6005	ECEA0JK101	Electrolytic 6.3V 100	1	
C6006	ECKF1H221KB	Ceramic 50V 220P	1	
C6007	ECEA1HK0R1	Electrolytic 50V 0.1	1	
C6008	ECKF1H103ZF	Ceramic 50V 0.01	1	
C6009	ECEA0JK470	Electrolytic 6.3V 47	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C6010		ECQB1H682JH	Mylar 50V 6800P	1	
C6011		ECQV1H184JZ	Mylar 50V 0.18	1	
C6012-6014		ECKF1H103ZF	Ceramic 50V 0.01	3	
C6015,6016		ECCF1H330JC	Ceramic 50V 33P	2	
C6019		ECKF1H103ZF	Ceramic 50V 0.01	1	
C6022,6023		ECQV1H104JZ	Mylar 50V 0.1	2	
C6024		ECEA1EK330	Electrolytic 25V 33	1	
C6029		ECEA1EK3R3	Electrolytic 25V 3.3	1	
C6030		ECEA0JK101	Electrolytic 6.3V 100	1	
C6031		ECEA1CK100	Electrolytic 16V 10	1	
			Crystal Oscillator		
X6001		VSX0082		1	
			(Chrominance Section)		
			P.C.B. Ass'y		
IC8001		VEFC007		1	
			Integrated Circuit		
IC8002		BA7025L		1	NV-850EG
			Transistors		
Q8001		2SB641		1	(P,Q,R,S,T)
					or 2SA937M(Q,R,S)
Q8003,8004		2SD636		2	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q8006		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q8007		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
					NV-850EG
Q8008,8009		2SD636		2	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
			Combination Cricuit		
			(Transistor & Resistor)		
QR8002		DTC124A		1	or UN1212 NV-850EG
QR8003,8004		DTC144A		2	or UN1213
			Diodes		
D8001		MA165		1	
D8002		MA165		1	NV-850EG
			Resistors		
R8001		ERDS2TJ272	2.7K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R8003		ERDS2TJ102	1K	1	
R8004		ERDS2TJ471	470	1	
R8005		ERDS2TJ222	2.2K	1	
R8006		ERDS2TJ103	10K	1	
R8007		ERDS2TJ105	1M	1	
R8009		ERDS2TJ182	1.8K	1	
R8010		ERDS2TJ562	5.6K	1	
R8011		ERDS2TJ272	2.7K	1	
R8012,8013		ERDS2TJ103	10K	2	
R8014		ERDS2TJ221	220	1	NV-850EG
R8015		ERDS2TJ102	1K	1	
R8016		ERDS2TJ101	100	1	
R8017		ERDS2TJ102	1K	1	
R8018		ERDS2TJ562	5.6K	1	
R8019		ERDS2TJ822	8.2K	1	
R8020		ERDS2TJ271	270	1	
R8021		ERDS2TJ122	1.2K	1	
R8022		ERDS2TJ393	39K	1	
R8023		ERDS2TJ333	33K	1	
R8024		ERDS2TJ471	470	1	
R8025		ERDS2TJ332	3.3K	1	NV-850EG
R8026		ERDS2TJ122	1.2K	1	NV-850EG
R8027		ERDS2TJ272	2.7K	1	NV-850EG
R8028,8029		ERDS2TJ103	10K	2	NV-850EG
R8030		ERDS2TJ390	39	1	NV-850EG
R8031		ERDS2TJ222	2.2K	1	NV-850EG
R8032		ERDS2TJ154	150K	1	NV-850EG
R8033		ERDS2TJ223	22K	1	NV-850EG
R8034		ERDS2TJ102	1K	1	NV-850EG
R8035		ERDS2TJ470	47	1	
R8036		ERDS2TJ104	100K	1	
R8037,8038		ERDS2TJ562	5.6K	2	
R8040		ERDS2TJ152	1.5K	1	
R8041		ERDS2TJ102	1K	1	
R8042		ERDS2TJ822	8.2K	1	
R8043		ERDS2TJ333	33K	1	
R8044		ERDS2TJ473	47K	1	
R8045		ERDS2TJ392	3.9K	1	
			Capacitors		
C8001		ECKF1H221KB	Ceramic 50V 220P	1	
C8002		ECCF1H270JC	Ceramic 50V 27P	1	
C8003		ECKF1H472ZF	Ceramic 50V 4700P	1	
C8004		ECEA1CK470	Electrolytic 16V 47	1	
C8005		ECKF1H102KB	Ceramic 50V 1000P	1	
C8006		ECQB1H223KH	Mylar 50V 0.022	1	
C8007		ECEA10Z100	Electrolytic 10V 10	1	
C8008		ECKF1H103ZF	Ceramic 50V 0.01	1	
C8009		ECKF1H471KB	Ceramic 50V 470P	1	
C8010		VCYG1E103KR	Semiconductor 25V 0.01	1	
C8011		ECQV1H154JZ	Mylar 50V 0.15	1	
C8012		ECKF1H681KB	Ceramic 50V 680P	1	NV-850EG
C8013		ECEA1CK100	Electrolytic 16V 10	1	
C8014		ECEA0JK470	Electrolytic 6.3V 47	1	
C8015		ECKF1H103ZF	Ceramic 50V 0.01	1	
C8016		ECEA0JK470	Electrolytic 6.3V 47	1	
C8017		ECKF1H103ZF	Ceramic 50V 0.01	1	NV-850EG
C8018		ECKF1H102KB	Ceramic 50V 1000P	1	NV-850EG
C8019		ECEA1AK330	Electrolytic 10V 33	1	NV-850EG
C8020		ECKF1H102KB	Ceramic 50V 1000P	1	NV-850EG
C8021		ECQV1H563JZ	Mylar 50V 0.056	1	NV-850EG
C8022		ECEA1AK330	Electrolytic 10V 33	1	NV-850EG

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C8023		ECEA0JK470	Electrolytic 6.3V 47	1	NV-850EG
C8024		ECEA1CK100	Electrolytic 16V 10	1	
C8025		ECQV1H104JZ	Mylar 50V 0.1	1	
C8026		ECKF1H103ZF	Ceramic 50V 0.01	1	
C8027		ECCF1H050CC	Ceramic 50V 5P	1	
C8028,8029		VCYG1C104MR1	Semiconductor 16V 0.1	2	
C8030		VCYG1C104MR1	Semiconductor 16V 0.1	1	NV-850EG
C8031		ECKF1H471KB	Ceramic 50V 470P	1	
C8032		ECKF1H821KB	Ceramic 50V 820P	1	
C8033		ECQV1H154JZ	Mylar 50V 0.15	1	
C8034		ECQB1H103KH	Mylar 50V 0.01	1	
			Coils		
L8001		VLQEL05F270K	27μH	1	
L8002		VLQEL05F470K	47μH	1	
L8003		VLQEL05F331K	330μH	1	
L8004		VLQEL05F681K	680μH	1	
L8005		VLQEL05F101K	100μH	1	
L8006		VLQEL05F681K	680μH	1	
L8008		VLQEL05F150K	15μH	1	
L8009		ELM7Q207A		1	NV-850EG
L8010		VLQEL05F101K	100μH	1	NV-850EG
L8011		VLQEL05F151K	150μH	1	
L8012		VLQEL05F470K	47μH	1	
L8013		VLQEL05F681K	680μH	1	
			Combination Circuits		
			(Capacitor & Resistor)		
CR8001		EXEP820K332C	82P, 3.3K	1	
CR8002		EXED103M821C	0.01,820	1	
			Delay Line		
DL8001		EFDBR124A13B		1	
			Filters		
FL8001		VLF0299		1	
FL8002		VLF0143		1	NV-850EG
			Crystal Oscillator		
XC8001		VSX0129A		1	or VSX0129B
			Connectors		
JSA,JSB,		VJS1180	5P	4	
JSC,JSD					
			Miscellaneous		
		VGU1027	VR Knob	3	
		VJF0022	Wire Saddle (Large)	1	
		VJF0052	Binder	4	
		VJJ0106	Mic Jack	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		VEP05053A	Head Amp & Luminance (2)		
			P.C. Board Unit		
			P.C.B. Ass'y		
IC3501		VEFY005		1	
			Integrated Circuit		
IC3502		AN6326N		1	
			Transistors		
Q3501		2SC2377		1	(C,D)
Q3502,3503		2SC2206		2	(A,B,C)
Q3504		2SB641		1	(P,Q,R,S,T)
					or 2SA937M(Q,R,S)
Q3505-3508		2SC2206		4	(A,B,C)
Q3509		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q3550		2SD661		1	
Q3551,3552		2SC2377		2	(C,D)
Q3562		2SC2206		1	(A,B,C)
			Diodes		
D3501		MA165		1	
D3502		RD3.3EB	Zener	1	
D3550,3551		MA165		2	
			Resistors		
R3501		ERDS2TJ102	1K	1	
R3502		ERDS2TJ152	1.5K	1	
R3503		ERDS2TJ471	470	1	
R3504		ERDS2TJ681	680	1	
R3505		ERDS2TJ122	1.2K	1	
R3508		ERDS2TJ102	1K	1	
R3509		ERDS2TJ154	150K	1	
R3510		ERDS2TJ152	1.5K	1	
R3511		ERDS2TJ392	3.9K	1	
R3512		ERDS2TJ331	330	1	
R3513		ERDS2TJ104	100K	1	
R3514		ERDS2TJ472	4.7K	1	
R3515		EROS2CKG1601	Metal 1.6K	1	
R3516		ERDS2TJ222	2.2K	1	
R3517		ERDS2TJ104	100K	1	
R3518		ERDS2TJ122	1.2K	1	
R3519		ERDS2TJ123	12K	1	
R3521		EVN61AA00B13	Variable 1K	1	
R3522		ERDS2TJ471	470	1	
R3523		EROS2CKG4700	Metal 470	1	
R3524		ERDS2TJ682	6.8K	1	
R3525		ERDS2TJ122	1.2K	1	
R3526		EROS2CKG1201	Metal 1.2K	1	
R3527		EROS2CKG2200	Metal 220	1	
R3528		ERDS2TJ100	10	1	
R3529		ERDS2TJ682	6.8K	1	
R3530,3531		ERDS2TJ560	56	2	
R3532		ERDS2TJ100	10	1	
R3533		ERDS2TJ122	1.2K	1	
R3534		ERDS2TJ820	82	1	
R3535		ERDS2TJ124	120K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R3536-3539		ERDS2TJ152	1.5K	4	
R3540		ERDS2TJ391	390	1	
R3541		ERDS2TJ102	1K	1	
R3542		ERDS2TJ561	560	1	
R3543,3544		ERDS2TJ102	1K	2	
R3545		ERDS2TJ152	1.5K	1	
R3546		ERDS2TJ391	390	1	
R3547		ERDS2TJ122	1.2K	1	
R3548,3549		ERDS2TJ102	1K	2	
R3550,3551		ERDS2TJ103	10K	2	
R3552,3553		EVN3ACA00B13	Variable 1K	2	
R3554,3555		ERDS2TJ123	12K	2	
R3556		EVN3ACA00B13	Variable 1K	1	
R3557		ERDS2TJ562	5.6K	1	
R3558		ERDS2TJ270	27	1	
R3570		ERDS2TJ102	1K	1	
R3571,3572		ERDS2TJ681	680	2	
R3573,3574		ERDS2TJ561	560	2	
R3575		EVN61AA00B23	Variable 2K	1	
			Capacitors		
C3501		ECEA1EK4R7	Electrolytic 25V 4.7	1	
C3502		ECEA1HKNR47	Electrolytic 50V 0.47	1	
C3503		ECEA1HK010	Electrolytic 50V 1	1	
C3504		ECEA0JK101	Electrolytic 6.3V 100	1	
C3505		ECCF1H120KC	Ceramic 50V 12P	1	
C3506		ECEA0JK470	Electrolytic 6.3V 47	1	
C3507		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C3508		VCYG1E103KR	Semiconductor 25V 0.01	1	
C3509		ECEA0JK101	Electrolytic 6.3V 100	1	
C3510		ECKF1H181KB	Ceramic 50V 180P	1	
C3511-3513		ECEA1HK010	Electrolytic 50V 1	3	
C3514		ECEA1EK4R7	Electrolytic 25V 4.7	1	
C3515		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C3516		ECKF1H151KB	Ceramic 50V 150P	1	
C3517		ECKF1H122KB	Ceramic 50V 1200P	1	
C3520		ECCF1H120KC	Ceramic 50V 12P	1	
C3521		VCYG1E103KR	Semiconductor 25V 0.01	1	
C3522		ECEA1CK470	Electrolytic 16V 47	1	
C3523		ECCF1H820KC	Ceramic 50V 82P	1	
C3524		ECKF1H181KB	Ceramic 50V 180P	1	
C3525		VCYG1E333KF	Semiconductor 25V 0.033	1	
C3526,3527		VCYG1C104MR1	Semiconductor 16V 0.1	2	
C3528		ECKF1H103ZF	Ceramic 50V 0.01	1	
C3529		ECEA50Z1	Electrolytic 50V 1	1	
C3530		ECEA1CK100	Electrolytic 16V 10	1	
C3531		ECEA1HK010	Electrolytic 50V 1	1	
C3532		ECEA1CK100	Electrolytic 16V 10	1	
C3533		VCYG1C104MR1	Semiconductor 16V 0.1	1	
C3534		ECQV1H104JZ	Mylar 50V 0.1	1	
C3535		ECCF1H120KC	Ceramic 50V 12P	1	
C3536		VCYG1C104MR1	Semiconductor 16V 0.1	1	
C3537		ECEA1CK100	Electrolytic 16V 10	1	
C3538		ECEA0JK470	Electrolytic 6.3V 47	1	
C3539		ECKF1H151KB	Ceramic 50V 150P	1	
C3540		VCYG1E103KR	Semiconductor 25V 0.01	1	
C3541		ECKF1H271KB	Ceramic 50V 270P	1	
C3542		VCKG1E431JA	Semiconductor 25V 430P	1	
C3543		ECCF1H560KC	Ceramic 50V 56P	1	
C3544		ECCF1H180KC	Ceramic 50V 18P	1	
C3545		VGYG1E103KR	Semiconductor 25V 0.01	1	
C3546		ECEA0JK470	Electrolytic 6.3V 47	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C3547		ECEA0JK330	Electrolytic 6.3V 33	1	
C3548		ECQB1H333KH	Mylar 50V 0.033	1	
C3549		ECCF1H560KC	Ceramic 50V 56P	1	
C3551		VCYG1C104MR	Semiconductor 16V 0.1	1	
C3554-3556		ECV1ZW40X64T	Trimmer 500V 40P	3	
C3568		ECEA0JK470	Electrolytic 6.3V 47	1	
C3569		VCKG1E391JA	Semiconductor 25V 390P	1	
C3570		VCYG1E103KR	Semiconductor 25V 0.01	1	
C3573		ECQV1H154JZ	Mylar 50V 0.15	1	
C3574		ECKF1H102ZF	Ceramic 50V 1000P	1	
C3576		ECQV1H104JZ	Mylar 50V 0.1	1	
C3577		ECCF1H150JC	Ceramic 50V 15P	1	
C3578		ECQV1H104JZ	Mylar 50V 0.1	1	
C3579		ECQV1H274JZ	Mylar 50V 0.27	1	
C3580		ECCF1H060CC	Ceramic 50V 6P	1	
C3581		ECCF1H120KC	Ceramic 50V 12P	1	
C3582,3583		ECQV1H104JZ	Mylar 50V 0.1	2	
			Coils		
L3501-3503		VLQEL05F101K	100μH	3	
L3504		VLQEL05F820K	82μH	1	
L3505		VLQEL05F151K	150μH	1	
L3506-3508		VLQEL05F101K	100μH	3	
L3509		VLQEL05F102K	1mH	1	
L3510		VLQEL05F180K	18μH	1	
L3512		VLQEL05F151K	150μH	1	
L3513		VLQEL05F471K	470μH	1	
L3514		VLQEL05F390K	39μH	1	
L3515,3516		VLQ0127	2.2μH	2	
L3550,3551		VLQEL05F150K	15μH	2	
L3565		VLQEL05F101K	100μH	1	
L3566		VLQEL05F2R2K	2.2μH	1	
			Combination Circuits (Capacitor & Resistor)		
CR3501		EXEC390K222C	39P, 2.2K	1	
CR3503		EXED561K561C	560P, 560	1	
CR3504		EXED103Z682C	0.01, 6.8K	1	
			Delay Line		
DL3501		EFDVN645A43D		1	
			Filters		
FL3501		VLF0186		1	
FL3502		VLF0187		1	
			Relay		
RY3550		VSY1019		1	or VSL 022

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Connector		
P3501	VJP1229	2P	1	
		Miscellaneous		
	VGQ0474	Spacer	1	
	VJF0035	Wire Saddle	1	
	VSC1058	Shield Case (Top)	1	
	VSC1059	Shield Case (Middle)	1	
	VSC1060	Shield Case (Bottom)	1	
	VEP06212A	Operation P.C. Board Unit		
		Integrated Circuits		
IC6501	MN1450BVG		1	
IC6502,6503	BA668A		2	
		Transistors		
Q6501	2SB642		1	
Q6502-6504	2SD637		3	
		Combination Circuit		
		(Transistor & Resistor)		
QR6501,6502	DTC144A		2	or UN1213
		Diodes		
D6501	LN81RCPHL	LED	1	
D6502,6503	MA165		2	
D6504	RD7.5EB3	Zener	1	
D6506,6507	MA165		2	
D6508	MA165		1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Resistors		
R6501	ERDS2TJ391	390	1	
R6502	ERDS2TJ301	300	1	
R6503	ERDS2TJ681	680	1	
R6504	ERDS2TJ122	1.2K	1	
R6505	ERDS2TJ272	2.7K	1	
R6506	ERDS2TJ472	4.7K	1	
R6507	ERDS2TJ822	8.2K	1	
R6508	ERDS2TJ183	18K	1	
R6510	ERDS2TJ333	33K	1	
R6511	ERDS2TJ623	62K	1	
R6512	ERDS2TJ152	1.5K	1	
R6515	EVN3ACA00B14	Variable 10K	1	
R6516	ERDS2TJ103	10K	1	
R6517	ERDS2TJ563	56K	1	
R6518	ERDS2TJ560	56	1	
R6519	ERDS2TJ104	100K	1	
R6520,6521	ERDS2TJ330	33	2	
R6522	ERDS2TJ223	22K	1	
R6523	ERDS2TJ103	10K	1	
R6524	ERDS2TJ223	22K	1	
R6527	ERDS2TJ223	22K	1	
R6528	ERDS2TJ473	47K	1	
R6529	ERDS2TJ223	22K	1	
R6530,6531	ERDS2TJ473	47K	2	
R6532	ERDS2TJ223	22K	1	
R6533	ERDS2TJ561	560	1	
R6534	ERDS2TJ394	390K	1	
R6536	ERDS2TJ683	68K	1	
R6537	ERDS2TJ561	560	1	
R6538	ERDS2TJ394	390K	1	
R6539	ERDS2TJ822	8.2K	1	
R6540	ERDS2TJ273	27K	1	
R6541	ERDS2TJ822	8.2K	1	
R6542	ERDS2TJ273	27K	1	
R6546	ERDS2TJ562	5.6K	1	
R6547	ERDS2TJ104	100K	1	
R6548	ERDS2TJ103	10K	1	
R6549,6550	ERDS2TJ471	470	2	
R6551	ERDS2TJ152	1.5K	1	
		Capacitors		
C6501	ECEA1HK010	Electrolytic 50V 1	1	
C6502	ECCF1H470JU	Ceramic 50V 47P	1	
C6503	ECKF1H103ZF	Ceramic 50V 0.01	1	
C6504-6506	ECEA1CK100	Electrolytic 16V 10	3	
C6507	ECEA1HK4R7	Electrolytic 50V 4.7	1	
C6508,6509	ECEA1CK100	Electrolytic 16V 10	2	
C6510	ECEA1HK4R7	Electrolytic 50V 4.7	1	
C6511	ECEA1HK010	Electrolytic 50V 1	1	
C6512	ECEA1HKNR47	Electrolytic 50V 0.47	1	
C6513	ECEA0JK101	Electrolytic 6.3V 100	1	
C6514	VCYG1E104MR1	Semiconductor 25V 0.1	1	
C6515,6516	ECKF1H103ZF	Ceramic 50V 0.01	2	
C6517	ECEA1HK010	Electrolytic 50V 1	1	
C6518,6519	ECKF1H103ZF	Ceramic 50V 0.01	2	
			1	
		Display Tubes		
DP6502	VSL0031		1	
DP6506	VSL0030		1	
		Switches		
S6502-6508	EVQQS307K		7	
S6510-6513	EVQQS307K		4	
S6514	ESD14307		1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
S6515,6516	EVQQS307K		2	
		Connectors		
P6501	VJP1236	9P	1	
P6502-6505	VJP1230	3P	4	
		Miscellaneous		
	KL04	LED Spacer	1	
	VJF0052	Binder	2	
	VJF0172	Display Tube Holder	2	(For DP6506)
	VJF0183	Level Meter Display Tube	2	(For DP6502)
		Holder		
	VQL322	Spacer	1	
	VEP07186G/H	TV Demodulator P.C. Board		NV-850E/B
		Unit		
		Integrated Circuits		
IC701	BN5115		1	VIF IC
IC751	AN5215		1	SIF IC
		Transistors		
Q701	2SD636		1	(Q,R,S,T)
				or 2SC1684(Q,R,S,T)
Q702	2SB641		1	(Q,R,S,T)
				or 2SA564(Q,R,S,T)
Q703	2SD636		1	(S,T) or 2SD637(S,T)
Q707,708	2SD636		2	(Q,R,S,T)
				or 2SC1684(Q,R,S,T)
				NV-850B
Q709.	2SA564A		1	(Q,R,S,T)
				or 2SA733(K,P,Q)
				NV-850B
Q710	2SD636		1	(Q,R,S,T)
				or 2SC1684(Q,R,S,T)
				NV-850B
Q7006	2SD636		1	(Q,R,S,T)
				or 2SC1684(Q,R,S,T)
		Diodes		
D701,702	MA165		2	NV-850E

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
D703	MA165		1	
D705	10E1		1	or ERB1201G1
		Resistors		
R701	ERDS2TJ222	2.2K	1	
R702	EVN50AA00B23	Variable 2K	1	
R703	ERDS2TJ472	4.7K	1	
R704	ERDS2TJ392	3.9K	1	NV-850E
R705	EVN50AA00B23	Variable 2K	1	NV-850E
R706	ERDS2TJ222	2.2K	1	NV-850E
R707	ERDS2TJ393	39K	1	
R708	ERDS2TJ473	47K	1	
R711	ERDS2TJ274	270K	1	
R712	ERDS2TJ183	18K	1	
R713	ERDS2TJ392	3.9K	1	
R714	ERDS2TJ102	1K	1	
R715	ERDS2TJ391	390	1	
R716	ERDS2TJ561	560	1	
R717	ERDS2TJ102	1K	1	
R719	ERDS2TJ561	560	1	
R722	ERDS2TJ183	18K	1	
R723	ERDS2TJ562	5.6K	1	
R724	EROS2CKG8200	Metal 820	1	
R725	ERDS2TJ470	47	1	
R726	ERDS2TJ680	68	1	
R727	EROS2CKG1001	Metal 1K	1	
R728	EVN50AA0B14	Variable 10K	1	
R731	ERDS2TJ680	68	1	
R732	ERDS2TJ102	1K	1	
R733	ERDS2TJ270	27	1	
R734	ERDS2TJ332	3.3K	1	
R735	ERDS2TJ272	2.7K	1	
R738	ERDS2TJ561	560	1	
R740	ERDS2TJ103	10K	1	
R743	ERDS2TJ473	47K	1	NV-850B
R744-747	ERDS2TJ223	22K	4	NV-850B
R748	ERDS2TJ472	4.7K	1	NV-850B
R749	ERDS2TJ682	6.8K	1	NV-850B
R752	ERD2FCG220	Fuse Resistor 22	1	⚠
R754	ERDS2TJ681	680	1	
R755	EVN50AA00B24	Variable 20K	1	
R756	ERDS2TJ102	1K	1	
R761	ERDS2TJ102	1K	1	NV-850B
R762	ERDS2TJ271	270	1	NV-850B
R763	ERDS2TJ104	100K	1	NV-850B
R764	ERDS2T223	22K	1	NV-850B
R790	ERDS2TJ750	75	1	
R791	ERDS2TJ102	1K	1	
R7014	ERDS2TJ102	1K	1	
R7015	ERDS2TJ103	10K	1	
		Capacitors		
C701	ECEA1CK220	Electrolytic 16V 22	1	
C702	ECEA1CK100	Electrolytic 16V 10	1	
C703	ECKF1H103ZF	Ceramic 50V 0.01	1	NV-850E
C704	ECEA1CK330	Electrolytic 16V 33	1	NV-850E
C705	ECEA50ZR68	Electrolytic 50V 0.68	1	
C706	ECEA1CK330	Electrolytic 16V 33	1	
C707,708	ECKF1H103ZF	Ceramic 50V 0.01	2	
C709	ECQV1H224JZ	Mylar 50V 0.22	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C710		ECKF1H103ZF	Ceramic 50V 0.01	1	
C711,712		ECCF1H030CC	Ceramic 50V 3P	2	
C713		ECCF1H121JP	Ceramic 50V 120P	1	
C714		ECCF1H220JC	Ceramic 50V 22P	1	
C715,716		ECKF1H103ZF	Ceramic 50V 0.01	2	
C717		ECCF1H150JC	Ceramic 50V 15P	1	
C718		ECCF1H560JR	Ceramic 50V 56P	1	
C719		ECEA50Z1	Electrolytic 50V 1	1	
C720		ECKF1H103ZF	Ceramic 50V 0.01	1	
C721		ECEA1CK470	Electrolytic 16V 47	1	
C723		ECEA1EKN4R7	Electrolytic 25V 4.7	1	
C724		ECCF1H150JC	Ceramic 50V 15P	1	
C726		ECCF1H680JC	Ceramic 50V 68P	1	
C727		ECCF1H220JR	Ceramic 50V 22P	1	
C730		ECCF1H390JC	Ceramic 50V 39P	1	NV-850E
C731		ECQB1H103KH	Mylar 50V 0.01	1	
C732		ECKF1H103ZF	Ceramic 50V 0.01	1	
C733		ECCF1H151J	Ceramic 50V 150P	1	
C734		ECKF1H103ZF	Ceramic 50V 0.01	1	
C737		ECEA1CK220	Electrolytic 16V 22	1	
C739		ECKF1H103ZF	Ceramic 50V 0.01	1	
C743		ECQB1H103KH	Mylar 50V 0.01	1	
C745		ECKF1H103ZF	Ceramic 50V 0.01	1	NV-850B
C746		ECEA1CK220	Electrolytic 16V 22	1	
C747		ECKF1H103ZF	Ceramic 50V 0.01	1	NV-850B
C751		ECCF1H050CC	Ceramic 50V 5P	1	
C753		ECQV1H473JZ	Mylar 50V 0.047	1	
C754		ECEA1CU101	Electrolytic 16V 100	1	
C755		ECCF1H390JP	Ceramic 50V 39P	1	
C756		ECCF1H120JC	Ceramic 50V 12P	1	
C757		ECKF1H561KB	Ceramic 50V 560P	1	
C758		ECCF1H820JP	Ceramic 50V 82P	1	
C759		ECEA1CK100	Electrolytic 16V 10	1	
C761		ECQB1H103JH	Mylar 50V 0.01	1	
C791		ECQB1H273JH	Mylar 50V 0.027	1	
			Coils		
L701		VLQEL05F220K	22μH	1	
L703		VLQEL05F150K	15μH	1	
L704		VLQEL05F470K	47μH	1	
L705		VLQEL05F560K	56μH	1	
L706		VLQEL05F820K	82μH	1	
L707		VTQ0014	10mH	1	
			Transformers		
T701		EULHLB333		1	NV-850E
T701		EULHLB360		1	NV-850B
T702		EIM7A511	Sound Trap	1	
T703		EIV7E016F	Selective	1	
T704		EIV7E016E	AFC	1	
T751		EISE7E006A	SIF	1	
T752		EISE7E006B	Detect	1	
			Crystal Oscillators		
X702		EFCS5R5MS4	5.5MHz Filter	1	or VLF0178 NV-850E
X702		EFCS6R0MS4	6.0MHz Filter	1	or VLF0179 NV-850B
X703		EFCS5R5MW3	5.5MHz Trap	1	or VLF0182 NV-850E
X703		EFCS6R0MS4	6.0MHz Trap	1	or VLF0183 NV-850B

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Connectors		
P701		VJP1234	7P	1	
P702		VJP1229	2P	1	
P704		VJP1237	10P	1	
			Miscellaneous		
		TNV77759F2	Tuner	1	NV-850E ⚠
		TNV87359F2	Tuner	1	NV-850B ⚠
		VSC0742	Shield Case (Main)	1	
		VSC0743	Shield Case (Bottom)	1	
		VSC1052	Shield Case (Top)	1	
		VGQ0471	Top Spacer	1	
		VEP07193A	TV Demodulator P.C. Board	1	NV-850EG
			Unit		
			Integrated Circuits		
IC703		BN5115		1	
IC705		AN5130		1	
			Transistors		
Q703		2SD637		1	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q704		2SC1687		1	
Q705		2SB642		1	(Q,R,S,T)
					or 2SA564A(Q,R,S,T)
Q706		2SD636		1	(S,T) or 2SD637(S,T)
Q707		2SD637		1	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q708		2SC1687		1	
			Diodes		
D702		MA165		1	
D704		MA165		1	
D709		MA165		1	
D710,711		10E1		2	or ERB101G1
			Resistors		

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R710		ERDS2TJ103	10K	1	
R711		ERDS2TJ823	82K	1	
R712		ERDS2TJ103	10K	1	
R713		ERDS2TJ562	5.6K	1	
R714		EVN50AA00B23	Variable 2K	1	
R715		ERDS2TJ392	3.9K	1	
R716		ERDS2TJ562	5.6K	1	
R717		EVN50AA00B23	Variable 2K	1	
R718		ERDS2TJ562	5.6K	1	
R720		ERDS2TJ562	5.6K	1	
R721		ERDS2TJ821	820	1	
R722		ERDS2TJ470	47	1	
R723		EROS2CKG1001	Metal 1K	1	
R724		ERDS2TJ103	10K	1	
R728		ERDS2TJ183	18K	1	
R729		ERDS2TJ225	2.2M	1	
R730		ERDS2TJ332	3.3K	1	
R731		ERDS2TJ470	47	1	
R732		EROS2CKG8200	Metal 820	1	
R733		ERDS2TJ183	18K	1	
R734		ERDS2TJ562	5.6K	1	
R735		ERDS2TJ680	68	1	
R736		EVN50AA00B14	Variable 10K	1	
R737		ERDS2TJ102	1K	1	
R738		ERDS2TJ470	47	1	
R739		ERDS2TJ221	220	1	
R740		ERDS2TJ563	56K	1	
R741		ERDS2TJ102	1K	1	
R742		ERDS2TJ683	68K	1	
R743		ERDS2TJ122	1.2K	1	
R744		ERDS2TJ271	270	1	
R745		ERDS2TJ274	270K	1	
R747		ERDS2TJ822	8.2K	1	
R748		ERDS2TJ392	3.9K	1	
R749,750		ERDS2TJ562	5.6K	2	
R751		ERDS2TJ821	820	1	
R752		ERDS2TJ122	1.2K	1	
R755		ERDS2TJ392	3.9K	1	
R757		ERDS2TJ103	10K	1	
R760		ERDS2TJ152	1.5K	1	
R761		ERDS2TJ332	3.3K	1	
R762		ERDS2TJ471	470	1	
R763		ERDS2TJ750	75	1	
R765,766		ERDS2TJ221	220	2	
			Capacitors		
C704		ECEA1CK220	Electrolytic 16V 22	1	
C705		ECEA1CK100	Electrolytic 16V 10	1	
C706,707		ECKF1H103ZF	Ceramic 50V 0.01	2	
C708		ECEA1CK330	Electrolytic 16V 33	1	
C709		ECQB1H103KH	Mylar 50V 0.01	1	
C710		ECEA50ZR68	Electrolytic 50V 0.68	1	
C711		ECKF1H103ZF	Ceramic 50V 0.01	1	
C712		ECEA1CK330	Electrolytic 16V 33	1	
C713		ECCF1H150JC	Ceramic 50V 15P	1	
C714,715		ECKF1H103ZF	Ceramic 50V 0.01	2	
C716		ECCF1H330JC	Ceramic 50V 33P	1	
C721-724		ECKF1H103ZF	Ceramic 50V 0.01	4	
C725		ECCF1H150JC	Ceramic 50V 15P	1	
C726		ECEA1HK010	Electrolytic 50V 1	1	
C727		ECEA1CU101	Electrolytic 16V 100	1	
C729		ECEA50Z1	Electrolytic 50V 1	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C730		ECKF1H103ZF	Ceramic 50V 0.01	1	
C731		ECEA1EKN4R7	Electrolytic 25V 4.7	1	
C732		ECCF1H220JC	Ceramic 50V 22P	1	
C734		ECCF1H680JS	Ceramic 50V 68P	1	
C735		ECCF1H820JP	Ceramic 50V 82P	1	
C736		ECCF1H220JC	Ceramic 50V 22P	1	
C737,738		ECCF1H020CC	Ceramic 50V 2P	1	
C739		ECCF1H101J	Ceramic 50V 100P	1	
C740		ECKF1H103ZF	Ceramic 50V 0.01	1	
C742		ECQB1H223KH	Mylar 50V 0.022	1	
C743		ECQV1H224JZ	Mylar 50V 0.22	1	
C744		ECCF1H050CC	Ceramic 50V 5P	1	
C745		ECCF1H560JP	Ceramic 50V 56P	1	
C746-748		ECKF1H103ZF	Ceramic 50V 0.01	3	
C749		ECKF1H102KB	Ceramic 50V 1000P	1	
C750		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C751		ECKF1H102KB	Ceramic 50V 1000P	1	
C754		ECKF1H103ZF	Ceramic 50V 0.01	1	
C755		ECEA1CK470	Electrolytic 16V 47	1	
C756		ECEA16Z10	Electrolytic 16V 10	1	
C760		ECQB1H103KH	Mylar 50V 0.01	1	
C761,762		ECEA1CK330	Electrolytic 16V 33	2	
C763		ECCF1H680JP	Ceramic 50V 68P	1	
C767,768		ECKF1H103ZF	Ceramic 50V 0.01	2	
C769		ECCF1H060CC	Ceramic 50V 6P	1	
C770		ECCF1H101JP	Ceramic 50V 100P	1	
			Coils		
L701		VLQEL05F100K	10μH	1	
L702		VLQEL05F560K	56μH	1	
L704		VLQEL05F101K	100μH	1	
L705		VLQEL05F120K	12μH	1	
L706		VLQEL05F2R2K	2.2μH	1	
L707		ELQSR56KB	0.56μH	1	
L708		VLQEL05F100K	10μH	1	
L709		VLQEL05F101K	100μH	1	
			Transformers		
T702		EULHLB318		1	
T703		EIM5A521		1	
T704		EIV7E018C	Selective	1	
T705		EIV7E016E	AFC	1	
T706		EULHLB319		1	
T707		EIV7E018C	Selective	1	
T712		EIM5A521	Trap	1	
			Crystal Oscillator		
X701		EFCS5R5MW3		1	or VLF0182
			Connectors		
P701		VJP1234	7P	1	
P702		VJP1229	2P	1	
P704		VJP1237	10P	1	
P705		VJP1232	5P	1	
P706		VJP1230	3P	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Miscellaneous		
		TNV77759F2	Tuner	1	
		VMZ0550	Barrier	1	
		VSC0902	Shield Case (Large-Top)	1	
		VSC0903	Shield Case (Large-Main)	1	
		VSC0904	Shield Case (Large-Bottom)	1	
		VSC0905	Shield Case (Small-Top)	1	
		VSC0906	Shield Case (Small-Main)	1	
		VSC0907	Shield Case (Small-Bottom)	1	
		VEP07194A	Decoder P.C. Board Unit		NV-850EG
			Integrated Circuits		
IC7001		BN5823		1	
IC7002		LA7755		1	
IC7003		TC4066BP		1	or µPD4066BC
IC7004,7005		AN5215		2	
			Transistors		
Q7001		2SD637		1	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q7002		2SB641		1	(Q,R,S,T)
					or 2SA564(Q,R,S,T)
Q7003,7004		2SD637		1	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q7005		2SB641		1	(Q,R,S,T)
					or 2SC564(Q,R,S,T)
Q7006-7016		2SD637		11	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q7020		2SD636		1	(Q,R,S,T)
					or 2SC1684(Q,R,S,T)
			Diodes		
D7001-7004		MA165		4	
D7005,7006		MA1082	Zener	2	or RD8.2EB2
D7007-7011		MA165		5	
D7016		MA165		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Resistors		
R7001		EVN61AA00B33	Variable 3K	1	or EVNK6AA00B33
R7002		ERDS2TJ224	220K	1	
R7003		ERDS2TJ333	33K	1	
R7004		ERDS2TJ182	1.8K	1	
R7005		ERDS2TJ152	1.5K	1	
R7006		ERDS2TJ563	56K	1	
R7007		ERDS2TJ682	6.8K	1	
R7008,7009		ERDS2TJ102	1K	2	
R7010,7011		ERDS2TJ103	10K	2	
R7012,7013		ERDS2TJ473	47K	2	
R7014		ERD2FCG220	Fuse Resistor 22	1	⚠
R7015		ERDS2TJ473	47K	1	
R7016,7017		ERDS2TJ474	470K	2	
R7018		ERDS2TJ104	100K	1	
R7019		ERDS2TJ182	1.8K	1	
R7020		ERDS2TJ273	27K	1	
R7021		ERDS2TJ102	1K	1	
R7022		ERDS2TJ333	33K	1	
R7023		ERDS2TJ104	100K	1	
R7024		ERDS2TJ103	10K	1	
R7025		ERDS2TJ104	100K	1	
R7026		EVNK6AA00B15	Variable 100K	1	or EVN61AA00B15
R7027		ERDS2TJ154	150K	1	
R7028		EVNK6AA00B54	Variable 50K	1	or EVN61AA00B54
R7029		ERDS2TJ823	82K	1	
R7030		ERDS2TJ104	100K	1	
R7031		ERDS2TJ564	560K	1	
R7032		ERDS2TJ104	100K	1	
R7033		ERDS2TJ684	680K	1	
R7034		ERD2FCG220	Fuse Resistor 22	1	⚠
R7035		ERDS2TJ124	120K	1	
R7036		ERDS2TJ683	68K	1	
R7037		ERDS2TJ102	1K	1	
R7038		ERDS2TJ222	2.2K	1	
R7039		ERDS2TJ104	100K	1	
R7040		EVN50AA00B14	Variable 10K	1	
R7041		ERDS2TJ473	47K	1	
R7042		ERDS2TJ182	1.8K	1	
R7043		ERDS2TJ104	100K	1	
R7044		EVN50AA00B14	Variable 10K	1	
R7045		ERDS2TJ473	47K	1	
R7046		ERDS2TJ104	100K	1	
R7047,7048		ERDS2TJ102	1K	2	
R7049-7053		ERDS2TJ103	10K	5	
R7054		ERDS2TJ273	27K	1	
R7055		ERDS2TJ102	1K	1	
R7056		ERDS2TJ152	1.5K	1	
R7057		ERDS2TJ103	10K	1	
R7058		ERDS2TJ273	27K	1	
R7059-7061		ERDS2TJ103	10K	3	
R7062		ERDS2TJ273	27K	1	
R7063		ERD2FCG220	Fuse Resistor 22	1	⚠
R7064		ERDS2TJ152	1.5K	1	
R7065		ERDS2TJ103	10K	1	
R7066		ERDS2TJ330	33	1	
R7067,7068		ERDS2TJ472	4.7K	2	
R7069		ERDS2TJ152	1.5K	1	
R7070		ERDS2TJ104	100K	1	
R7071-7074		ERDS2TJ471	470	4	
R7075		ERDS2TJ272	2.7K	1	
R7076		EVN50AA00B14	Variable 10K	1	
R7077		ERDS2TJ102	1K	1	
R7078		ERDS2TJ562	5.6K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R7079,7080		ERES2TJ823	82K	2	
R7081,7082		ERDS2TJ102	1K	2	
R7089		ERDS2TJ473	47K	1	
R7091		ERD2FCG220	Fuse Resistor 22	1	⚠
R7092		ERDS2TJ183	18K	1	
R7093,7094		ERDS2TJ103	10K	2	
R7095,7096		ERDS2TJ681	680	2	
			Capacitors		
C7001		ECEA1CK470	Electrolytic 16V 47	1	
C7002		ECEA0JS471	Electrolytic 6.3V 470	1	or ECEA0JU471
C7003		ECQB1H333JH	Mylar 50V 0.033	1	
C7004		ECQB1H822JH	Mylar 50V 8200P	1	
C7005		ECQB1H152JH	Mylar 50V 1500P	1	
C7006		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7007		ECQB1H223JH	Mylar 50V 0.022	1	
C7008		ECEA1CK100	Electrolytic 16V 10	1	
C7009		ECEA1CS221	Electrolytic 16V 220	1	or ECEA1CU221
C7010		ECEA1CK100	Electrolytic 16V 10	1	
C7011		ECEA0JK101	Electrolytic 6.3V 100	1	
C7012,7013		ECEA1EK4R7	Electrolytic 25V 4.7	2	
C7014,7015		ECKF1H103ZF	Ceramic 50V 0.01	2	
C7016		ECEA1CK470	Electrolytic 16V 47	1	
C7017		ECEA1CU101	Electrolytic 16V 100	1	
C7018		ECQB1H273JH	Mylar 50V 0.027	1	
C7019		ECEA1HKR47	Electrolytic 50V 0.47	1	
C7020		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C7021		ECEA1HK010	Electrolytic 50V 1	1	
C7022		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C7023		ECEA1HKR47	Electrolytic 50V 0.47	1	
C7024		ECQB1H223JH	Mylar 50V 0.022	1	
C7025		ECEA1AS101	Electrolytic 10V 100	1	or ECEA1AU101
C7026-7028		ECEA1CK100	Electrolytic 16V 10	3	
C7029		ECEA1EK4R7	Electrolytic 25V 4.7	1	
C7030		ECQB1H183JH	Mylar 50V 0.018	1	
C7031		ECQB1H152JH	Mylar 50V 1500P	1	
C7032		ECQB1H153JH	Mylar 50V 0.015	1	
C7033		ECQB1H152JH	Mylar 50V 1500P	1	
C7034		ECEA1EK4R7	Electrolytic 25V 4.7	1	
C7035,7036		ECKF1H102KB	Ceramic 50V 1000P	2	
C7037		ECEA50Z1	Electrolytic 50V 1	1	
C7038,7039		ECEA1CU101	Electrolytic 16V 100	2	
C7040		ECKF1H102KB	Ceramic 50V 1000P	1	
C7041		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7042		ECEA1CK470	ELectrolytic 16V 47	1	
C7043		ECKF1H102KB	Ceramic 50V 1000P	1	
C7044		ECCF1H120JC	Ceramic 50V 12P	1	
C7045		ECKF1H102KB	Ceramic 50V 1000P	1	
C7046		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7047		ECCF1H120JC	Ceramic 50V 12P	1	
C7048		ECKF1H102KB	Ceramic 50V 1000P	1	
C7049		ECEA1CK470	Electrolytic 16V 47	1	
C7050		ECCF1H101JC	Ceramic 50V 100P	1	
C7051		ECEA1CK330	Electrolytic 16V 33	1	
C7052		ECEA1CK100	Electrolytic 16V 10	1	
C7053		ECQB1H223JH	Mylar 50V 0.022	1	
C7054		ECQB1H152JH	Mylar 50V 1500P	1	
C7055,7056		ECCF1H390JP	Ceramic 50V 39P	2	
C7057,7058		ECQB1H822JH	Mylar 50V 8200P	2	
C7091,7092		ECQB1H103JH	Mylar 50V 0.01	2	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Coils		
L7001		VLQEL05F102K	1mH	1	
L7002		VTQ0016	36mH	1	
L7003,7004		VLQEL05F102K	1mH	2	
L7010,7011		VTQ0014	10mH	2	
			Transformers		
T7001		EIR7QG001B		1	
T7002,7003		EIS7E006B		2	
			Crystal Oscillators		
X7001,7002		EFCS5R5MS4B		2	
X7003,7004		EFCS5R74MS4B		2	
X7005,7006		ELB5A016		2	
			Connectors		
P7006		VJP1230	3P	1	
P7007		VJP1232	5P	1	
		VEP07195A/B	Timer P.C. Board Unit		
			Integrated Circuits		
IC7501		MN1455BVL		1	
IC7503		MN1512VTJ		1	
IC7504		MN1228		1	
IC7505		AN5033		1	
			Transistors		
Q7501		2SB641		1	or 2SA564, 2SA733, 2SB642
Q7503		2SD636		1	or 2SC1684, 2SC945A, 2SD637
Q7506		2SB641		1	or 2SA564, 2SA733, 2SB642
Q7507,7508		2SB644		2	
Q7510		2SD637		1	or 2SC1685
Q7511		2SB642		1	
Q7513-7515		2SB642		3	
Q7520		2SD636		1	or 2SC1684, 2SC945A, 2SD637
Q7522		2SD636		1	or 2SC1684, 2SC945A, 2SD637
			Combination Circuit (Transistor & Resistor)		
QR7503		DTC144A		1	or UN1213
QR7504		DTC114A		1	or UN1211 NV-850E/EG

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Diodes		
D7501,7502	MA165		2	
D7505	LN28WPVT	LED	1	
D7506,7507	10E2		2	or ERB1202G1
D7509	MA27WB		1	
D7510	LN28WPVT	LED	1	
D7520	MA165		1	
D7521	MA165		1	NV-850E/EG
D7522	MA165		1	
D7523	LN38GCPP	LED	1	
D7550-7554	MA165		5	
D7561-7563	MA165		3	
D7574	MA165		1	
D7597	MA165		1	NV-850B
		Resistors		
R7501	ERDS2TJ122	1.2K	1	
R7502	ERC14GJ126	Solid 1.2M	1	
R7503,7504	ERDS2TJ102	1K	2	
R7505,7506	ERDS2TJ223	22K	2	
R7507	ERDS2TJ181	180	1	
R7508	ERDS2TJ334	330K	1	
R7509	EVNK6AA00B25	Variable 200K	1	or EVN61AA00B25
R7510	ERDS2TJ124	120K	1	
R7511	ERDS2TJ154	150K	1	
R7512	ERDS2TJ104	100K	1	
R7516	ERDS2TJ473	47K	1	
R7517	ERDS2TJ221	220	1	
R7518	ERDS2TJ105	1M	1	
R7526	ERDS2TJ104	100K	1	NV-850E/EG
R7527	ERDS2TJ104	100K	1	
R7528	ERDS2TJ103	10K	1	
R7529	ERDS2TJ473	47K	1	
R7530	ERDS2TJ104	100K	1	
R7531	ERDS2TJ124	120K	1	
R7532	ERDS2TJ122	1.2K	1	
R7533	EWEU2A016B24	Variable 20K	1	
R7534	ERDS2TJ271	270	1	
R7535	EVNK6AA00B14	Variable 10K	1	or EVN61AA00B14
R7536	ERDS2TJ103	10K	1	
R7537	ERDS2TJ473	47K	1	
R7539	ERDS2TJ390	39	1	
R7540	ERDS2TJ820	82	1	
R7541	ERDS2TJ153	15K	1	
R7542	ERDS2TJ473	47K	1	
R7546	ERDS2TJ273	27K	1	
R7547	ERDS2TJ104	100K	1	
R7548	ERDS2TJ472	4.7K	1	
R7549	ERDS2TJ104	100K	1	
R7550	ERDS2TJ391	390	1	
R7551-7556	ERDS2TJ273	27K	6	
R7557-7559	ERDS2TJ473	47K	3	
R7560	ERDS2TJ222	2.2K	1	
R7561	ERDS2TJ332	3.3K	1	
R7562	ERDS2TJ223	22K	1	
R7567	ERDS2TJ223	22K	1	
R7568	ERDS2TJ332	3.3K	1	NV-850E/EG

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
R7570,7571	ERDS2TJ332	3.3K	2	
R7575	ERDS2TJ334	330K	1	NV-850E/EG
R7576	ERDS2TJ223	22K	1	
R7577	ERDS2TJ473	47K	1	
R7579	ERDS2TJ473	47K	1	
		Capacitors		
C7501	ECCF1H080DC	Ceramic 50V 8P	1	
C7502	ECV1ZW20X53T	Trimmer 500V 20P	1	
C7503	ECCF1H050CC	Ceramic 50V 5P	1	
C7504	ECCF1H330JC	Ceramic 50V 33P	1	
C7505	ECCF1H220JC	Ceramic 50V 22P	1	
C7506	ECKF1H103ZF	Ceramic 50V 0.01	1	
C7507,7508	ECEA1HKR22	Electrolytic 50V 0.22	2	
C7510	ECEA1AK101	Electrolytic 10V 100	1	
C7511	ECKF1H103ZF	Ceramic 50V 0.01	1	
C7512	ECEA1HKR22	Electrolytic 50V 0.22	1	
C7513,7514	ECCF1H470J	Ceramic 50V 47	2	
C7515	ECQV1H104JZ	Mylar 50V 0.1	1	
C7516	ECQV1H683JZ	Mylar 50V 0.068	1	
C7517	ECQV1H273JZ	Mylar 50V 0.027	1	or ECQB1H273JH
C7518	ECQV1H823JZ	Mylar 50V 0.082	1	
C7519-7521	ECKF1H103ZF	Ceramic 50V 0.01	3	
C7522	ECEA1JS100	Electrolytic 6.3V 10	1	
C7523	ECEA1HK010	Electrolytic 50V 1	1	
C7524	ECKF1H103ZF	Ceramic 50V 0.01	1	
C7527	ECKF1HK4R7	Electrolytic 50V 4.7	1	
C7528	ECQV1H473JZ	Mylar 50V 0.047	1	
C7530	ECEA1HK010	Electrolytic 50V 1	1	
C7531	ECEA1CK100	Electrolytic 16V 10	1	
C7532	ECEA1HK010	Electrolytic 50V 1	1	
C7533	ECKF1H103ZF	Ceramic 50V 0.01	1	
C7540-7542	EECW2R3A3R3	Gold Capacitor 2.3V 3.3F	3	
C7543	ECEA1HK010	Electrolytic 50V 1	1	
C7550	ECCF1H101J	Ceramic 50V 100P	1	
C7553	ECKF1H103ZF	Ceramic 50V 0.01	1	
C7554	ECKF1H103ZF	Ceramic 50V 0.01	1	
C7555	ECQV1H104JZ	Mylar 50V 0.1	1	
		Coil		
L7501	VLQEL05F102K	1mH	1	
		Crystal Oscillators		
X7501	VSX0071		1	
X7502	VSX0094		1	
X7503	VSX0082		1	
		Switches		
SW7516	VES0213		1	
SW7517	ESD14137A		1	or VSS0050 NV-850E/EG
SW7518	EVQQSB05G		1	
SW7519,7520	EVQQSB05G		2	NV-850E/EG
		Connectors		
P7501	VJP1237	10P	1	
P7503	VJP1235	8P	1	
P7505	VJP1229	2P	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Miscellaneous		
		VGQ0457	LED Spacer	1	(For D7523)
		VGT0305	VR Knob	1	
		VJF0004	Binder	1	
		VEP07196A/B	Timer Operation P.C.		
			Board Unit		
			Integrated Circuits		
IC7502		AN6873N		1	or MSL915RS
IC7506		MN1453VTN		1	
IC7580		µPC1373H		1	or µPC1373HA
			Transistors		
Q7523-7526		2SD636		4	or 2SC1684, 2SC945A,
					2SD637
Q7580		2SB641		1	or 2SA564, 2SA733,
					2SB642
Q7581		2SD636		1	or 2SC1684, 2SC945A,
					2SD637
			Combination Circuits		
			(Transistor & Resistor)		
QR7501,7502		DTA144A		2	or UN1113
QR7504		DTC114A		1	or UN1211 NV-850E/EG
			Diodes		
D7514		MA165		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
D7516-6519		MA165		4	
D7530		MA165		1	
D7531-7537		LN071175P1	LED	7	
D7570		MA165		1	
D7571		MA165		1	
D7574-7579		LN061174P	LED	6	
D7595		MA165		1	NV-850E/EG
D7596		RD5.6EB	Zener	1	or MA1056
D7598,7599		MA165		2	
			Resistors		
R7515		ERDS2TJ561	560	1	
R7519		ERDS2TJ821	820	1	
R7520,7521		ERDS2TJ561	560	2	
R7538		ERDS2TJ221	220	1	
R7563		ERDS2TJ391	390	1	
R7564		ERDS2TJ821	820	1	
R7566		ERDS2TJ561	560	1	
R7573		ERDS2TJ2R7	2.7	1	
R7578		ERDS2TJ103	10K	1	
R7580		ERDS2TJ154	150K	1	
R7581		ERDS2TJ120	12	1	
R7582		ERDS2TJ102	1K	1	
R7583		ERDS2TJ473	47K	1	
R7584		ERDS2TJ334	330K	1	
R7585		ERDS2TJ124	120K	1	
R7586		ERDS2TJ473	47K	1	
R7599		ERDS2TJ223	22K	1	
			Capacitors		
C7551		ECEA1CK100BJ	Electrolytic 16V 10	1	
C7552		ECEA1HKR22BJ	Electrolytic 50V 0.22	1	
C7580		ECQV1H183JZ	Mylar 50V 0.018	1	or ECQB1H183JZ
C7581		APS472J100	Mylar 100V 4700P	1	
C7582		ECEA1CK100BJ	Electrolytic 16V 10	1	
C7583		ECEA1HKR47BJ	Electrolytic 50V 0.47	1	
C7584		ECEA1CK470UJ	Electrolytic 16V 47	1	
C7585		ECEA1CK100BJ	Electrolytic 16V 10	1	
C7586		ECQB1H102JH	Mylar 50V 1000P	1	
C7587		ECKZ1H331KB	Ceramic 50V 330P	1	
			Transformer		
T7580		ELM7Q206A		1	
			Switches		
SW7501		EVQQS307K		1	
SW7504		ESD14182		1	
SW7505-7508		EVQQS307K		4	
SW7510		EVQQS307K		1	
SW7512,7513		EVQQS307K		2	
SW7514		VSP0111		1	or ESB641
SW7521,7522		EVQQS307K		2	
SW7524		EVQQS307K		1	
SW7525		ESB65140		1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Connectors		
P7504	VJP1235	8P	1	
P7506	VJP1230	3P	1	
		Display Tube		
DP7501	VSL0027		1	
		Miscellaneous		
	VGQ0417	Display Tube Holder	2	
	VGQ0458	Display Tube Spacer	2	
	VSC1087	Shield Case (Top)	1	
	VSC1088	Shield Case (Main)	1	
	VSC1089	Shield Case (Bottom)	1	
	VSC1090	Shield Case	1	
	VEP00A99A	FM Audio Main P.C. Board Unit		
		Integrated Circuits		
IC4501,4502	AN6391		2	
IC4503	AN6291		1	
IC4504	AN6326N		1	
IC4505	AN6558		1	
IC4506,4507	TA7302P		2	
IC4508	AN78N05		1	
		Transistors		
Q4501-4505	2SD636		5	
Q4506	2SD655		1	(E,F)
Q4507-4511	2SD636		5	
Q4512	2SD655		1	(E,F)
Q4513-4516	2SD636		4	
Q4520	2SC2377		1	
Q4521	2SB641		1	
Q4522	2SD636		1	
Q4523	2SB641		1	
Q4524	2SD638		1	
Q4525	2SD636		1	
Q4526	2SC2377		1	
Q4527	2SB641		1	
Q4528-4531	2SD636		4	
Q4532,4533	2SD638		2	
Q4534,4535	2SD636		2	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Combination Circuits		
		(Transistor & Resistor)		
QR4501,4502	DTC124A		2	or UN1212
QR4505,4506	DTA124A		2	or UN1112
		Diodes		
D4501,4502	MA165		2	
D4503,4504	OA90R		2	
D4505-4510	MA165		6	
D4511	RD4.7EB	Zener	1	
D4512	RD6.2EB	Zener	1	
D4514	MA165		1	
		Resistors		
R4501	ERDS2TJ333	33K	1	
R4502	ERDS2TJ682	6.8K	1	
R4503	EVN38CA00B23	Variable 2K	1	
R4504	ERDS2TJ392	3.9K	1	
R4505	ERDS2TJ472	4.7K	1	
R4506	ERDS2TJ104	100K	1	
R4507,4508	ERDS2TJ102	1K	2	
R4509	ERDS2TJ392	3.9K	1	
R4510	ERDS2TJ102	1K	1	
R4511	ERDS2TJ821	820	1	
R4512	ERDS2TJ331	330	1	
R4513	ERDS2TJ332	3.3K	1	
R4514	ERDS2TJ103	10K	1	
R4516	EVN61AA00B13	Variable 1K	1	
R4520,4521	ERDS2TJ473	47K	2	
R4522	ERDS2TJ272	2.7K	1	
R4523	ERDS2TJ332	3.3K	1	
R4524,4525	ERDS2TJ104	100K	2	
R4526	ERDS2TJ472	4.7K	1	
R4527	ERDS2TJ153	15K	1	
R4528	ERDS2TJ472	4.7K	1	
R4529-4531	ERDS2TJ473	47K	3	
R4532	ERDS2TJ222	2.2K	1	
R4533	ERDS2TJ103	10K	1	
R4534-4536	ERDS2TJ223	22K	3	
R4539	ERDS2TJ122	1.2K	1	
R4540	ERDS2TJ332	3.3K	1	
R4541	EVNK0AA00B25	Variable 200K	1	
R4542,4543	ERDS2TJ104	100K	2	
R4544	ERDS2TJ472	4.7K	1	
R4545	ERDS2TJ151	150	1	
R4546	ERDS2TJ472	4.7K	1	
R4547	ERDS2TJ153	15K	1	
R4548	ERDS2TJ102	1K	1	
R4550,4551	ERDS2TJ104	100K	2	
R4552	ERDS2TJ472	4.7K	1	
R4553	ERDS2TJ332	3.3K	1	
R4554	ERDS2TJ272	2.7K	1	
R4555-4559	ERDS2TJ473	47K	5	
R4560	ERDS2TJ472	4.7K	1	
R4561	ERDS2TJ153	15K	1	
R4562	ERDS2TJ222	2.2K	1	
R4563	ERDS2TJ182	1.8K	1	
R4564	ERDS2TJ103	10K	1	
R4565	ERDS2TJ223	22K	1	
R4566	ERDS2TJ103	10K	1	
R4567	ERDS2TJ182	1.8K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R4568		EVN61AA00B15	Variable 100K	1	
R4570		ERDS2TJ103	10K	1	
R4571		ERDS2TJ122	1.2K	1	
R4572		EVNK0AA00B23	Variable 2K	1	
R4573		ERDS2TJ151	150	1	
R4574		ERDS2TJ153	15K	1	
R4575		ERDS2TJ472	4.7K	1	
R4576		ERDS2TJ562	5.6K	1	
R4577		ERDS2TJ563	56K	1	
R4578		ERDS2TJ562	5.6K	1	
R4579		ERDS2TJ473	47K	1	
R4580,4581		ERDS2TJ333	33K	2	
R4582		ERDS2TJ473	47K	1	
R4583		ERDS2TJ563	56K	1	
R4584		ERDS2TJ392	3.9K	1	
R4585		ERDS2TJ472	4.7K	1	
R4586		EVNK0AA00B13	Variable 1K	1	
R4587		ERDS2TJ103	10K	1	
R4590		ERDS2TJ104	100K	1	
R4591		ERDS2TK472	4.7K	1	
R4592		ERDS2TJ104	100K	1	
R4593		EVNK0AA00B25	Variable 200K	1	
R4594		ERDS2TJ332	3.3K	1	
R4595		ERDS2TJ333	33K	1	
R4596		ERDS2TJ682	6.8K	1	
R4597		EVN38CA00B23	Variable 2K	1	
R4598		ERDS2TJ272	2.7K	1	
R4600		ERDS2TJ102	1K	1	
R4603,4604		ERDS2TJ104	100K	2	
R4605-4607		ERDS2TJ102	1K	3	
R4610		ERDS2TJ272	2.7K	1	
R4612		EVN61AA00B53	Variable 5K	1	
R4613		ERDS2TJ103	10K	1	
R4614		ERDS2TJ223	22K	1	
R4615		ERDS2TJ330	33	1	
R4616		ERDS2TJ222	2.2K	1	
R4617		ERDS2TJ102	1K	1	
R4618		ERDS2TJ391	390	1	
R4619		ERDS2TJ821	820	1	
R4620,4621		ERDS2TJ220	22	2	
R4622		ERDS2TJ152	1.5K	1	
R4623		ERDS2TJ223	22K	1	
R4624		ERDS2TJ332	3.3K	1	
R4625,4626		ERDS2TJ100	10	2	
R4627		ERDS2TJ332	3.3K	1	
R4628,4629		ERDS2TJ101	100	2	
R4630		ERDS2TJ222	2.2K	1	
R4631		ERDS2TJ152	1.5K	1	
R4632,4633		ERDS2TJ222	2.2K	2	
R4634		ERDS2TJ182	1.8K	1	
R4635		ERDS2TJ222	2.2K	1	
R4636		ERDS2TJ102	1K	1	
R4637		ERDS2TJ182	1.8K	1	
R4638		ERDS2TJ222	2.2K	1	
R4639		ERDS2TJ102	1K	1	
R4641		ERDS2TJ103	10K	1	
R4642		ERDS2TJ473	47K	1	
R4643		ERDS2TJ101	100	1	
R4644		ERDS2TJ103	10K	1	
R4645		ERDS2TJ102	1K	1	
R4646		ERDS2TJ103	10K	1	
R4647		ERDS2TJ822	8.2K	1	
R4648		ERDS2TJ153	15K	1	
R4649		ERDS2TJ333	33K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R4650,4651		ERDS2TJ473	47K	2	
R4652		ERDS2TJ104	100K	1	
R4654		ERDS2TJ472	4.7K	1	
R4655,4656		ERDS2TJ182	1.8K	2	
R4657		ERDS2TJ103	10K	1	
R4659		ERDS2TJ473	47K	1	
R4661		ERDS2TJ104	100K	1	
R4662		ERDS2TJ102	1K	1	
R4663-4666		ERDS2TJ223	22K	4	
R4667,4668		ERDS2TJ102	1K	2	
R4669		ERDS2TJ473	47K	1	
R4670		ERDS2TJ474	470K	1	
R4671		ERDS2TJ561	560	1	
R4672		ERDS2TJ102	1K	1	
			Capacitors		
C4501		ECEA1CK100	Electrolytic 16V 10	1	
C4502,4503		ECEA1EK3R3	Electrolytic 25V 3.3	2	
C4504		ECCF1H101JC	Ceramic 50V 100P	1	
C4505		ECEA1CK100	Electrolytic 16V 10	1	
C4506		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4507		ECCF1H820JC	Ceramic 50V 82P	1	
C4508,4509		ECCF1H680JC	Ceramic 50V 68P	2	
C4511,4512		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4513		ECEA1CK100	Electrolytic 16V 10	1	
C4514		ECEA1CK220	Electrolytic 16V 22	1	
C4515		ECEA1CKN100J	Eelctrolytic 16V 10	1	
C4516		ECQB1H103KH	Mylar 50V 0.01	1	
C4517		ECEA1CK100	Electrolytic 16V 10	1	
C4518		ECKF1H221KB	Ceramic 50V 220P	1	
C4519		ECKF1H331KB	Ceramic 50V 330P	1	
C4520		ECEA1CK100	Electrolytic 16V 10	1	
C4521		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4522,4523		ECEA1CK100	Electrolytic 16V 10	2	
C4526,4527		ECEA1CK100	Electrolytic 16V 10	2	
C4533		ECEA25M3R3B	Electrolytic 25V 3.3	1	
C4534		ECQB1H223JH	Mylar 50V 0.022	1	
C4535		ECEA1CK100	Electrolytic 16V 10	1	
C4537		ECEA25M3R3	Electrolytic 25V 3.3	1	
C4538		ECQB1H123JH	Mylar 50V 0.012	1	
C4539		ECEA1CK470	Electrolytic 16V 47	1	
C4540,4541		ECEA1CK100	Electrolytic 16V 10	2	
C4542		ECEA10M101	Electrolytic 10V 100	1	
C4543		ECQB1H472JH	Mylar 50V 4700P	1	
C4544		ECKF1H331KB	Ceramic 50V 330P	1	
C4545		ECQB1H123JH	Mylar 50V 0.012	1	
C4546,4547		ECEA1CK100	Electrolytic 16V 10	2	
C4548,4549		ECEA1CK330	Electrolytic 16V 33	2	
C4550		ECCF1H330KC	Ceramic 50V 33P	1	
C4551		ECEA1CK100	Electrolytic 16V 10	1	
C4552		ECQB1H103JH	Mylar 50V 0.01	1	
C4553		ECEA1AK330BJ	Electrolytic 10V 33	1	
C4555		ECEA1CK100BJ	Electrolytic 16V 10	1	
C4556		ECEA1CK330UJ	Electrolytic 16V 33	1	
C4557		ECCF1H330KC	Ceramic 50V 33P	1	
C4558		ECEA25M3R3	Electrolytic 25V 3.3	1	
C4560		ECQB1H123JH	Mylar 50V 0.012	1	
C4561		ECEA1CK100	Electrolytic 16V 10	1	
C4568		ECEA25M3R3	Electrolytic 25V 3.3	1	
C4569		ECEA1CK100	Electrolytic 16V 10	1	
C4570		ECQB1H223JH	Mylar 50V 0.022	1	
C4571		ECEA1CK100	Electrolytic 16V 10	1	
C4572		ECEA10M101	Electrolytic 10V 100	1	
C4573		ECQB1H472JH	Mylar 50V 4700P	1	
C4574		ECKF1H331KB	Ceramic 50V 330P	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C4575		ECQB1H123JH	Mylar 50V 0.012	1	
C4576,4577		ECEA1CK100	Electrolytic 16V 10	2	
C4578		ECQB1H103JH	Mylar 50V 0.01	1	
C4579,4580		ECEA1CK100	Electrolytic 16V 10	2	
C4581,4582		ECEA1EK3R3	Electrolytic 25V 3.3	2	
C4583		ECCF1H101JC	Ceramic 50V 100P	1	
C4584		ECQV1H104JZ	Mylar 50V 0.1	1	
C4585		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4586		ECCF1H820JC	Ceramic 50V 82P	1	
C4587,4588		ECCF1H470JC	Ceramic 50V 47P	2	
C4590		ECEA1CK100	Electrolytic 16V 10	1	
C4591		ECEA1CK220	Electrolytic 16V 22	1	
C4592		ECEA1CKN100	Electrolytic 16V 10	1	
C4594		ECQB1H103KH	Mylar 50V 0.01	1	
C4595		ECEA1CK100	Electrolytic 16V 10	1	
C4596		ECKF1H221KB	Ceramic 50V 220P	1	
C4597		ECKF1H331KB	Ceramic 50V 330P	1	
C4598,4599		ECEA1CK100	Electrolytic 16V 10	2	
C4602		ECEA1CK100	Eelctrolytic 16V 10	1	
C4603-4608		ECKF1H103ZF	Ceramic 50V 0.01	6	
C4609		ECEA16Z10	Electrolytic 16V 10	1	
C4610		ECEA1CK100	Electrolytic 16V 10	1	
C4611		ECEA0JK470	Electrolytic 6.3V 47	1	
C4612		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4613		ECEA1CK100	Electrolytic 16V 10	1	
C4614,4615		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4616		ECEA1CK100	Electrolytic 16V 10	1	
C4617		ECEA1HK010	Electrolytic 50V 1	1	
C4618		ECEA1CK100	Electrolytic 16V 10	1	
C4619		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4620,4621		ECQV1H473JZ	Mylar 50V 0.047	2	
C4622,4623		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4625,4626		ECQV1H473JZ	Mylar 50V 0.047	2	
C4627,4628		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4629		ECEA16Z10	Electrolytic 16V 10	1	
C4630,4631		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4632		ECEA1CK100	Electrolytic 16V 10	1	
C4633		ECEA50ZR22	Electrolytic 50V 0.22	1	
C4634		ECEA10Z47	Electrolytic 10V 47	1	
C4635		ECEA16Z47	Electrolytic 16V 47	1	
C4637		ECQB1H103JH	Mylar 50V 0.01	1	
C4638		ECEA1CK100	Electrolytic 16V 10	1	
C4639		ECQB1H103JH	Mylar 50V 0.01	1	
C4640		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4641		ECEA1HK0R1	Electrolytic 50V 0.1	1	
C4642		ECEA16Z10	Electroytic 16V 10	1	
C4643,4644		ECEA1CK100	Electrolytic 16V 10	2	
C4645,4646		ECCF1H470JC	Ceramic 50V 47P	2	
C4647		ECCF1H080DC	Ceramic 50V 8P	1	
C4648		ECEA1EK4R7	Electrolytic 25V 4.7	1	
			Coils		
L4501		VLQEL05F101K	100μH	1	
L4505-4507		VLQEL05F101K	100μH	3	
L4512		VLQEL05F101K	100μH	1	
L4513		VLQEL05F471K	470μH	1	
L4514		VLQEL05F121K	120μH	1	
L4515,4516		VLQEL05F2R2K	2.2μH	2	
			Filters		
FL4501		VLF0317		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
FL4502		VLF0317		1	
FL4503,4504		EIT1QD001B		2	
FL4505,4506		VLF0305		2	
			Connectors		
P4502		VJP1235	8P	1	
P4505		VJP1233	6P	1	
P4506		VJP1232	5P	1	
			Miscellaneous		
		VSC1084	Shield Case (Main)	1	
		VSC1085	Shield Case (Top)	1	
		VSC1086	Shield Case (Bottom)	1	
		VJF0108	Rivet	2	
		VJF0175	P.C. Board Support	1	
		VXA2062	Barrier	1	
		VEP00B01A/B/C	FM Audio Sub P.C.Board		
			Unit		
			Integrated Circuits		
IC4301		TC9145P		1	
IC4302		TA7325P		1	
IC4303,4304		μPD4066BC		2	
IC4305		μPC4558C		1	
IC4306		BA6138		1	
IC4307		μPC4557C		1	
			Transistors		
Q4301,4302		2SD636		2	
Q4303,4304		2SD661		2	(S,T)
Q4305		2SD655		1	(E,F)
Q4306,4307		2SD661		2	(S,T)
Q4308		2SD655		1	(E,F)
Q4310,4311		2SB641		2	
Q4312		2SD636		1	
Q4313		2SB641		1	
Q4314,4315		2SD655		2	(E,F)
Q4318		2SD636		1	
			Combination Circuits		
			(Transistor & Resistor)		

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
QR4301		DTA114A		1	
QR4302-4305		DTC144A		4	
QR4306		DTC124A		1	or UN1212
			Diodes		
D4301-4304		MA165		4	
D4307-4317		MA165		11	
			Resistors		
R4301-4303		ERDS2TJ104	100K	3	
R4304		ERDS2TJ223	22K	1	
R4305		ERDS2TJ123	12K	1	
R4306		ERDS2TJ223	22K	1	
R4307		ERDS2TJ123	12K	1	
R4308		ERDS2TJ124	120K	1	
R4309		ERDS2TJ184	180K	1	
R4310		ERDS2TJ472	4.7K	1	
R4311		ERDS2TJ124	120K	1	
R4312		ERDS2TJ184	180K	1	
R4313		ERDS2TJ472	4.7K	1	
R4314,4315		ERDS2TJ223	22K	2	
R4317		ERDS2TJ151	150	1	
R4318		ERDS2TJ181	180	1	
R4319		ERDS2TJ394	390K	1	
R4320		ERDS2TJ332	3.3K	1	
R4323		ERDS2TJ223	22K	1	
R4325		ERDS2TJ151	150	1	
R4326		ERDS2TJ181	180	1	
R4327		ERDS2TJ332	3.3K	1	
R4328		ERDS2TJ394	390K	1	
R4329		EVNK0AA00B55	Variable 500K	1	
R4330,4331		ERDS2TJ104	100K	2	
R4332,4333		ERDS2TJ224	220K	2	
R4334,4335		ERDS2TJ472	4.7K	2	
R4336		ERDS2TJ273	27K	1	
R4338		ERDS2TJ473	47K	1	
R4339		ERDS2TJ474	470K	1	
R4340-4342		ERDS2TJ473	47K	3	
R4343		ERDS2TJ223	22K	1	
R4344		ERDS2TJ103	10K	1	
R4349,4350		ERDS2TJ823	82K	2	
R4351,4352		ERDS2TJ103	10K	2	
R4353,4354		ERDS2TJ473	47K	2	
R4355		ERDS2TJ223	22K	1	
R4356		ERDS2TJ221	220	1	
R4357,4358		ERDS2TJ223	22K	2	
R4360,4361		ERDS2TJ104	100K	2	
R4362		ERDS2TJ222	2.2K	1	
R4363		ERDS2TJ332	3.3K	1	
R4364		ERDS2TJ222	2.2K	1	
R4365		ERDS2TJ332	3.3K	1	
R4366		ERQ14AJ330	Metal 33	1	
R4367,4368		ERDS2TJ224	220K	2	
R4370,4371		ERDS2TJ101	100	2	
R4372		ERDS2TJ103	10K	1	
R4374		ERDS2TJ104	100K	1	
R4375		ERDS2TJ154	150K	1	
R4377		ERDS2TJ104	100K	1	
R4379		ERDS2TJ334	330K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R4380		ERDS2TJ333	33K	1	
R4381		ERDS2TJ154	150K	1	
R4382,4383		ERDS2TJ473	47K	2	
R4385-4387		ERDS2T473	47K	3	
R4388-4392		ERDS2TJ333	33K	5	
R4394		ERDS2TJ391	390	1	
R4395		ERDS2TJ471	470	1	
R4396		ERDS2TJ391	390	1	
R4397		ERDS2TJ471	470	1	
R4398		ERDS2TJ333	33K	1	
R4399		ERDS2TJ223	22K	1	
R4400		ERDS2TJ333	33K	1	
R4401		ERDS2TJ223	22K	1	
R4402-4407		ERDS2TJ474	470K	6	
R4408		ERDS2TJ473	47K	1	
R4409		ERDS2TJ103	10K	1	
R4410,4411		ERDS2TJ223	22K	2	
R4412		ERDS2TJ102	1K	1	
R4413,4414		ERDS2TJ223	22K	2	
R4416		ERDS2TJ104	100K	1	
			Capacitors		
C4301-4306		ECEA1HK010	Electrolytic 50V 1	6	
C4307-4309		ECEA1CK100	Electrolytic 16V 10	3	
C4310		ECEA1AK330	Electrolytic 10V 33	1	
C4311		ECEA1CK100	Electrolytic 16V 10	1	
C4312		ECEA1CK101	ELectrolytic 16V 100	1	
C4313		ECEA1CK100	Electrolytic 16V 10	1	
C4314		ECEA1AK330	Electrolytic 10V 33	1	
C4315		ECEA1CK100	Electrolytic 16V 10	1	
C4316,4317		ECEA1HK010	Electrolytic 50V 1	2	
C4318		ECEA1CK101	Electrolytic 16V 100	1	
C4319,4320		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4321,4322		ECEA1CK470	Electrolytic 16V 47	2	
C4323		ECEA1CK100	Electrolytic 16V 10	1	
C4324		ECEA1AU221	Electrolytic 10V 220	1	
C4325,4326		ECEA1CK100	Electrolytic 16V 10	2	
C4327		ECEA1CK470	Electrolytic 16V 47	1	
C4328		ECEA1EK100	Electrolytic 25V 10	1	
C4329-4331		ECEA1CK100	Electrolytic 16V 10	3	
C4332		ECEA1CU221	Electrolytic 16V 220	1	
C4333,4334		ECEA1AK470	Electrolytic 10V 47	2	
C4335,4336		ECEA1HK0R1	Electrolytic 50V 0.1	2	
C4337		ECEA1CK101	Electrolytic 16V 100	1	
C4338-4341		ECEA1CK100BJ	Electrolytic 16V 10	4	
C4343,4344		ECEA1CK100	Electrolytic 16V 10	2	
C4345,4346		ECEA1HK3R3	Electrolytic 50V 3.3	2	
			Connectors		
P4301		VJP1245	5P	1	
P4303		VJP1245	5P	1	
P4305		VJP1245	5P	1	
P4307		VJP1247	7P	1	
P4308		VJP1243	3P	1	
P4309		VJP1245	5P	1	
P4310,4311		VJP1243	3P	2	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
	ENC87751 /ENC87752	RF Converter Unit		
		Integrated Circuit		
IC1	AN3130		1	
		Transistors		
Q1	2SC2480		1	(UO-1)
Q2,3	2SC2570		1	or 2SC2671
		Diodes		
D1,2	1SS174		2	or 1SS86
D3,4	1SS135		2	or MA161
D5	MA161		1	NV-850B
		Resistors		
R1	ERJ8GC391	Chip 390	1	
R2	ERD10TJ681	1/8W 680	1	
R3	EVN38CA00B14	Variable 10K	1	
R4	ERD25FJ121	Metal 120	1	
R5	ERD10TJ823	1/8W 82K	1	
R6	ERJ8GCS682	Chip 6.8K	1	
R7	ERD10TJ682	1/8W 6.8K	1	NV-850E/EG
R7	ERD10TJ472	1/8W 4.7K	1	NV-850B
R8	ERJ8GCJ273	Chip 27K	1	
R9	ERJ8GCJ101	Chip 100	1	
R10	ERD10TJ221	1/8W 220	1	
R11	ERD10TJ470	1/8W 47	1	
R12	ERD10TJ680	1/8W 68	1	
R16	ERJ8GCJ101	Chip 100	1	
R17,18	ERD10TJ151	1/8W 150	2	
R19	ERJ8GCS332	Chip 3.3K	1	
R20	ERJ8GCS471	Chip 470	1	
R21	ERJ8GCS150	Chip 15	1	
R23	ERJ8GCS331	Chip 330	1	
R24	ERJ8GCS561	Chip 560	1	
R25	ERD10TJ390	1/8W 39	1	
R26	ERD10TJ182	1/8W 1.8K	1	
R27	ERJ8GCS471	Chip 470	1	
R28	ERJ8GCS180	Chip 18	1	
R29	ERD10TJ331	1/8W 330	1	
R30	ERJ8GCS390	Chip 39	1	
R31	ERD10TJ750	1/8W 75	1	
R32	ERD10TJ561	1/8W 560	1	
R33	ERD10TJ273	1/8W 27K	1	NV-850B
R34	ERD10TJ271	1/8W 270	1	
R35	ERJ8GCS271	Chip 270	1	
R36	ERD10TJ271	1/8W 270	1	
R37	ERJ8GCS271	Chip 270	1	
R38	ERJ8GCS122	Chip 1.2K	1	
R39	ERD10TJ221	1/8W 220	1	
R40	ERD10TJ000	0	1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Switch		
SW1	ESD14515		1	
		Connectors		
P1	VJP1244	4P	1	
P2	VJP1243	3P	1	

NOTE:
The capacitors, Filters, Transformers
for the RF Converter Unit are not
available as spare parts.

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		VJB00A53	Reel Sensor P.C. Board		
IC1501		0N2160	Photo Interrupter	1	
		VMX0645	Sensor Spacer	1	
		VJB00A54	Loading Motor Connection		
			P.C. Board		
			Capacitor		
C1504		VCYF1C333MR	Semiconductor 16V 0.033	1	
			Connectors		
P1512		VJP1246	6P	1	
P1513		VJP1242	2P	1	
P1514		VJP1229	2P	1	
P1515		VJP1242	2P	1	
		VJB00A55	Front Connection P.C.		
			Board		
			Connectors		
P1508		VJP1246	6P	1	
P1509		VJP1242	2P	1	
P1510		VJP1244	4P	1	
P1511		VJP1243	3P	1	
		VJB00A56	Takeup Photo Transistor		
			P.C. Board		
			Transistor		
Q6552		PN150NV	Photo Transistor	1	
		VMD0091	Transistor Holder	1	
		VJB00A82	Front Loading Motor		
			Connection P.C. Board		
			Capacitor		
C1503		ECKF1H102KB	Ceramic 50V 1000P	1	
			Switches		
		VSM0046		2	Cassette Up/Down SW
		VSM0047		1	Cassette In SW

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Connector		
P1507		VJP1248	8P	1	
		VJB00A94	Supply Photo Transistor		
			P.C. Board		
			Transistor		
Q1502		PN150NV	Photo Transistor	1	
			Capacitor		
C1502		ECKF1H102KB	Ceramic 50V 1000P	1	
		VMD0091	Transistor Holder	1	
		VJB00A98	Rear Jack P.C. Board		
			Resistors		
R1401		ERDS2TJ560	56	1	
R1402		ERDS2TJ271	270	1	NV-850E/EG
R1402		ERDS2TJ101	100	1	NV-850B
R1403		ERDS2TJ560	56	1	
R1404		ERDS2TJ271	270	1	NV-850E/EG
R1404		ERDS2TJ101	100	1	NV-850B
R1405,1406		ERDS2TJ101	100	2	NV-850E/EG
			Capacitors		
C1401,1402		ECKF1H222KB	Ceramic 50V 2200P	2	
			Switchs		
S1401		ESD14130		1	
S1402		ESD14161		1	NV-850E/EG
S1402		ESD14130		1	NV-850B
			Connectors		
P3001		VJP1242	2P	1	
P3002		VJP1243	3P	1	
P3003		VJP1244	4P	1	
P3004		VJP1243	3P	1	NV-850E/EG
P4302		VJP1244	4P	1	NV-850E/EG
P4304		VJP1246	6P	1	
P4306		VJP1243	3P	1	
P4401		VJP1243	3P	1	
			Miscellaneous		
		XTV3+8G	Screw	3	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
	VJB00B45	Heater Transformer P.C. Board		
		Transistor		
Q1201	2SD638		1	
		Diode		
D1201	RD15EB	Zener	1	
		Resistor		
R1201	ERDS2TJ222	2.2K	1	
		Transformer		
	TE3045T	Heater Transformer	1	
		Connector		
P1011	VJP1230	3P	1	
	VJB00B46	Power Transistor P.C. Board		
		Transistors		
Q1002	2SD1275		1	⚠
Q1101	2SD1265		1	⚠
		Capacitors		
C1201,1202	ECKF1H103ZF	Ceramic 50V 0.01	2	
		Connectors		
P1005	VJP1243	3P	1	
P1006	VJP1244	4P	1	
		Miscellaneous		
	VSC1064	Power Heat Sink	1	
	XTV3+8J	Screw	3	
	VJB00B64	IR Remote Control Receiver P.C. Board		
		Diode		
D7580	PN313		1	

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Connector		
P7580	VJP1224	2P	1	
	VJB00B78	Cylinder Heater P.C. Board		
		Transistor		
Q1501	2SD1275		1	⚠
		Capacitor		
C1501	ECKF1H103ZF	Ceramic 50V 0.01	1	
		Connector		
P1506	VJP1243	3P	1	
	VJB00976	Sensor LED P.C. Board		
D1501	GL450	LED	1	or LN59
	VMD0465	LED Holder	1	
	VJB01137	Power Transformer P.C. Board		
		Transistor		
Q1103	2SA684		1	⚠
		Diodes		
D1101-1104	10E1		4	⚠
D1105	RD6.8EB	Zener	1	
D1106-1109	10E1		4	⚠
D1111,1112	10E2		2	⚠
D1113	RD30EB	Zener	1	or EQA02OC
		Resistors		
R1101	ERDS2TJ391	390	1	
R1103	ERQ14LK1R5	Metal 1.5	1	⚠
R1104	ERDS2TJ392	3.9K	1	
		Capacitors		
C1101	ECEA1CU332	Electrolytic 16V 3300	1	
C1102	ECEA1CU470	Electrolytic 16V 47	1	
C1103	ECEA1EU332	Electrolytic 25V 3300	1	
C1105,1106	ECEA1JU101	Electrolytic 63V 100	2	
C1107	ECEA1HU470	Electrolytic 50V 47	1	
C1108	ECKF1H103ZF	Ceramic 50V 0.01	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Fuses		
F1101		XBA2C05TR0C	500mA	1	⚠
F1102,1103		XBA2C16TR0C	1.6A	2	⚠
			Connectors		
P1001		VJP1231	4P	1	
P1002		VJP1230	3P	1	
P1003		VJP1141	2P	1	
P1004		VJP1231	4P	1	
P7502		VJP1234	7P	1	
			Miscellaneous		
		VJF0052	Binder	1	
		VMX0237	AC Cord Cover	1	⚠
		VGH0079	Power Name Plate	1	
		VJA0111	AC Cord	1	NV-850E/EG⚠
		VJA0112	AC Cord	1	NV-850B⚠
		VMP0371	Transformer Angle	1	⚠
		VJF0107	Bushing	1	⚠
		SJT777	AC Cord Clamp Pin	2	⚠
		TJC6320	Fuse Holder	6	⚠
		VQL322	Spacer	1	
		VJB00C08	IR Remote Control Transmitter P.C. Board		
			Integrated Circuit		
IC1		MN6030B		1	
			Transistor		
Q1		2SD1458		1	
			Diodes		
D1		LN66	LED	1	or SE303A
D3		MA154WK		1	
			Resistors		
R1		ERDS2TJ102	1K	1	
R2		ERDS2TJ473	47K	1	
R3		ERDS2TJ1R0	1	1	
			Capacitors		
C1		ECKF1H471KB	Ceramic 50V 470P	1	
C2		ECKF1H121KB	Ceramic 50V 120P	1	
C3		ECEA0JK101	Electrolytic 6.3V 100	1	
			Crystal Oscillator		
X1		CSB420PB1		1	or EF0K420K05F1
			Switch		
SW1		ESD14126		1	

ORDER NO. VRD-8402-514

Service Manual

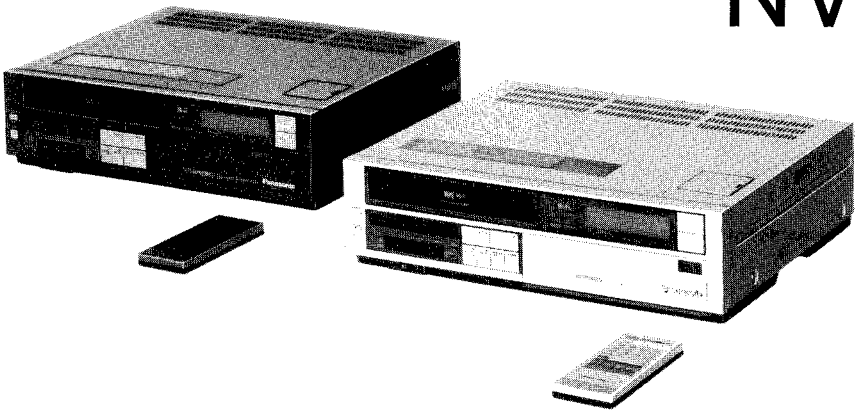
Supplement-1

Parts List

Video Cassette Recorder

Panasonic VHS Hi-Fi

NV-850-E -EG -B



Note: Reflecting the modified specifications of the NV-850-E, EG and B, Parts list of the original Service Manual (VRD-8310-489) has been partially modified. This Service Manual as the revised edition contains the latest parts list prepared as of December 20th, 1983. (Therefore, kindly cancel the former parts list and replace this as a revision or file with original.)

SPECIFICATIONS

Power Source: 220V AC 50/60Hz (NV-850-E/-EG)
240V AC 50/60Hz (NV-850-B)
Power Consumption: Approx. 38 watts
Television System: CCIR: 625 lines, 50 fields
PAL colour signal
Video Recording System: 2 rotary heads, helical scanning system
Luminance: FM azimuth recording
Colour signal: converted subscarrier phase shift recording
Audio Track: 1 track (Normal), Hi-Fi 2CH
Tape Format: Tape width 12.7mm high density tape
Tape Speed: 23.39mm/s
Record/Playback Time: 240min. with NV-E240
FF/REW Time: Less than 5.5min. with NV-E180
Heads: Video: 3 rotary heads
1 pair for video normal recording and playback (R-L Head)
1 pc. of head for video trick play with L head (field still)
Audio: 1 pair for audio Hi-Fi recording and playback (AR-AL Head)
Audio/Control: 1 stationary head
Erase: 1 full track erase
Input Level: Video: VIDEO IN connector (BNC)
1.0Vp-p, 75Ω terminated
AV jack (DIN 45482: NV-850-E/-EG) 1.0Vp-p, 75Ω terminated
Audio: LINE IN jack (Phono jack) × 2
More than −20dB, 50kΩ
AV jack (DIN 45482: NV-850-E/-EG) More than −10dB, 10kΩ MIC (M6) −70dB, More than 3.9kΩ
TV Tuners: VHF CH2 ~ CH12 (NV-850-E/-EG)
UHF CH21 ~ CH69
Output Level: Video: VIDEO OUT connector (BNC)
1.0Vp-p, 75Ω terminated
AV jack (DIN 45482: NV-850-E/-EG) 1.0Vp-p, 75Ω terminated
Audio: LINE OUT jack (Phono jack)
−8dB, less than 1kΩ
AV jack (DIN 45482: NV-850-E/-EG) −8dB, less than 1kΩ HEADPHONE jack
−34dBV max, 8Ω
RF Modulated: UHF CH36 ± 4
73 ± 3dBμ 75Ω unbalanced
Weight: 9.6kg
Dimensions: 430(W) × 115(H) × 370(D)mm

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

REPLACEMENT PARTS LIST

Note that, those parts indicated as " * " have been changed from the parts shown in the Remarks.

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C2034	*	ECEA1CK470	Electrolytic 16V 47	1	ECEA1CK470UJ

Mark For Changing
New Parts No.
Old Parts No.

1. MECHANICAL SECTION

Notes: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified by ⚠ have special characteristics important for safety. When replacing any of these components, use only the original ones.

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
1(1)		VEG0316	DD Cylinder Unit	1	⚠
2(1)		VEH0231	Uppwer Cylinder Unit	1	
3(1)		VJR0094	RT Terminal	1	
4(1)		VMC0051	Cylinder Heater P.C.B.	1	
			Pressure Spring		
5(1)		VBS0030	FE Head	1	
6(1)		VML1544	FE Lever	1	
7(1)		VMB1005	FE Lever Spring	1	
8(1)		VMD0570	Post Stopper	2	
9(1)		VXP0444	Roller Post Unit	2	
10(1)		VXA1964	Inclind Base (S) Unit	1	
11(1)		VXA1965	Inclind Base (T) Unit	1	
12(1)		VHD0133	Screw	2	
13(1)		VXA1963	Loading Base (1) Unit	1	
14(1)		VHD0045	Nut	1	
15(1)		VDP0908	Limiter Roller	1	
16(1)		VMX0288	Collar	1	
17(1)		VMX0456	Lower Limiter	1	
18(1)		VMX0663	Limiter Stand	1	
19(1)		VMB0754	P1 Spring	1	
20(1)		VMA6338	Position Adjust Hook	1	
21(1)		VMA6358	Position Plate	1	
22(1)		VMA4436	Shaft Holder Stopper	1	
23(1)		VXL0753	Loading Arm (L) Unit	1	
24(1)		VXL1152	Loading Arm (R) Unit	1	
25(1)		VMB0669	Loading Spring	2	
26(1)		VXP0520	Loading Gear Unit	2	
27(1)		VXA1966	Inclind Adjustment Plate	1	
28(1)		VHD0054	Adjustment Screw (15)	1	
29(1)		VMB0404	Adjustment Spring	1	
30(1)	*	VEH0233	A/C Head	1	VBR0233
31(1)		VHD0089B	Azimuth Adjustment Screw	1	
32(1)		VHN0038	Nylon Nut	1	
33(1)		VXA1571	Head Base Unit	1	
34(1)		VMB1189	A/C Height Spring	1	
35(1,2)		VHN0023	M3 Nylon Nut	2	
36(1)		VMX0647	Post Sleeve	1	
37(1)		VMB1235	P4 Spring	1	
38(1)		VMA6357	Chassis Bracket	1	
39(1)		VXS0059	Earth Plate Unit	1	
40(1)		VMA6353	LED Holder Angle	1	
41(1)		VHN0031	"X" Adjustment Nut	1	
42(2)		VXL1157	Tension Arm (1) Unit	1	
43(2)		VMB1187	Tension Spring	1	
44(2)		VXZ0165	Tension Band Unit	1	
45(2)	*	VXR0118	Supply Reel Table Unit	1	VXR0118A
46(2)		VXZ0159	Brake (S) Unit	1	
47(2)		VMB0661	Brake Arm Spring	1	
48(2)	*	VXR0119	Takeup Reel Table Unit	1	VXR0119A
49(2)		VXZ0164	T Soft Brake (1) Unit	1	
50(2)		VMB1186	Soft Brake Spring	1	
51(2)		VXZ0161	Brake (T) Unit	1	
52(2)		VML1532	P5 Pull Out Lever	1	
53(2)		VXL1154	Pressure Roller Lever Unit	1	
54(2)		VMB1188	Pin Pressure Spring	1	
55(2)	*	VXL1170	P5 Arm Unit	1	VXL1187
56(2)	*	VMB1190	P5 Spring	1	VMB1217
57(2,3)		VMX0653	Cut Washer	14	
58(2)		VMB1198	S Soft Brake Spring	1	
59(2)		VXZ0166	S Soft Brake Arm Unit	1	
60(2)		VXL1169	Select Lever (A) Unit	1	
61(2)		VMB1197	Select Lever Spring	1	
62(2)		VML1533	Select Lever (B)	1	
63(2)		VMS2504	Select Lever Shaft	1	
64(2)		VXP0521	Idler Arm Unit	1	
65(2)		VXA1968	Center Base Plate	1	
66(2)		VES0243	Safety Switch Unit	1	
67(2)		VEK2054	Dew Sensor Unit	1	
68(2)		VJF0004	Wire Saddle	1	
69(2)		VXA1970	Opener Angle Unit	1	
70(2)		VDG0147	Clutch Gear	1	
71(2)		VXP0523	Clutch Gear Unit	1	
72(2)		VDP0951	Clutch Pulley	1	
73(2)		VDG0155	Intermediate Gear (B)	1	
74(2)		VMB1195	Intermediate Gear Lift	1	
			Spring		
75(2)		VDG0156	Intermediate Gear (A)	1	
76(3)		VEM0200	Loading Motor	1	⚠
77(3)		VMA6360	Loading Motor Bracket	1	
78(3)		VMX0251	Oil Seal	1	
79(3)		VMD0104	Oil Pool	1	
80(3)		VXD0087	Housing Unit	1	
81(3)		VDG0146	Intermediate Gear	1	
82(3)		VDG0151	Kick Gear	1	
83(3)		VXA1972	Kick Base (1) Unit	1	
84(3)		VDG0154	Select Gear	1	
85(3)		VXL1167	Select Gear Lever (1) Unit	1	
86(3)		VXL1168	Sector Gear Unit	1	
87(3)		VDG0145	Intermediate Gear	1	
88(3)		VDG0141	Cam Gear	1	
89(3)		VDG0143	Drive Gear (2)	1	
90(3)		VDG0142	Intermediate Pulley Gear	1	
91(3)		VDV0148	Loading Belt	1	
92(3)	*	VSS0091	Mode Select Switch Unit	1	VES0246
93(3)		VMX0265	Thrust Washer	1	
94(3)		VXP0525	Capstan Rotor Unit	1	
95(3)		VEK2129	Capstan Stator Unit	1	⚠
96(3)		VXP0533	Capstan Pulley Unit	1	
97(3)		VDV0149	Capstan Belt	1	
98(3)		VXZ0168	Capstan Soft Brake Unit	1	
99(3)		VMB1204	Capstan Soft Brake Spring	1	
100(3)		VXA1996	Thrust Support Plate	1	
102(3)		VMX0396	Thrust Screw	1	
103(3)		VEH0213	FG Head Unit	1	
104(3)		VMX0308	Slide Washer	3	
105(3)		VMX0122	Slide Washer	3	
106(3)		VXL1158	Main Lever Unit	1	
107(3)		VMB1185	Kick Lever Spring	1	
108(3)		VMX0672	Cut Washer	1	
109(3)		VMX0644	Washer	1	
110(3)		VMB1184	Clutch Spring	1	
111(3)		VDG0153	Clutch Gear (1)	1	
112(3)		VDG0152	Clutch Gear (2)	1	
113(3)		VXL1165	Arm Lever (1) Unit	1	
114(3)		VMB1183	Sub Lever Spring	1	
115(3)		VXL1160	Sub Lever (1) Unit	1	
116(3)		VMB1192	Select Gear Lever Spring	1	
117(4)		VMA6354	Top Plate	1	
118(4)		VSM0047	Cassette In Detect Switch	1	
119(4)		VMD0580	Remains Display Board (L)	1	
120(4)		VMD0581	Remains Display Board (R)	1	
121(4)		VMB1089	Wiper Spring (L)	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
122(4)		VDG0160	Wiper Gear (L)	1	
123(4)		VML1436	Wiper Arm	1	
124(4)		VMS2305	Slider Roller Pin	2	
125(4)		VDP0839	Guide Roller	2	
126(4)	*	VXA1984	Side Plate (L)(1) Unit	1	VXA1980
127(4)		VMS2468	Slide Roller Pin (2)	2	
128(4)		VDG0120	Intermediate Gear	2	
129(4)		VDG0157	Shaft Gear	2	
130(4)		VML1546	Front Opener Link	1	
131(4)		VMD0091	Transistor Holder	2	
132(4)		VDP0903	Wiper Roller	2	
133(4)		VDP0902	Cassette Holder Roller	2	
134(4)		VMD0452	Cassette Guide	1	
135(4)		VMD0448	Slider (L)	1	
136(4)		VMD0453	Safety Tab	1	
137(4)		VMD0577	Front Guide (L)	1	
138(4)		VMB1091	Safety Spring	1	
139(4)		VMD0454	Spring Holder	1	
140(4)		VMD0450	Slider (R)	1	
141(4)		VMD0576	Front Guide (R)	1	
142(4)	*	VXA1985	Side Plate (R)(1) Unit	1	VXA1981
143(4)		VMS2499	Main Shaft	1	
144(4)		VKF0334	Blinder Panel	1	NV-850E(Black)/
					EG(Black)/B
144(4)		VKF0335	Blinder Panel	1	NV-850E(Silver)/
					EG(Silver)
145(4)		VMB1171	Blinder Panel Spring	1	
146(4)		VMD0455	F. Loading Motor Bracket	1	
147(4)		VDV0074	Loading Belt	1	
148(4)		VXA1754	Worm Shaft Pulley Unit	1	
149(4)		VDB0660	Worm Shaft Holder	1	
150(4)		VML1436	Wiper Arm	1	
151(4)		VDG0116	Wiper Gear (R)	1	
152(4)	*	VMB1090	Wiper Spring (R)	1	VMP1090
153(4)		VMD0456	Stopper Ring	1	
154(4)		VDG0118	Clutch Gear	1	
155(4)		VMX0531	Clutch Spacer	1	
156(4)		VDG0117	Worm Wheel	1	
157(4)		VMB1093	Clutch Spring	1	
158(4)		VMX0530	Clutch Washer	1	
159(4)		VMA6340	Switch Bracket	1	
160(4)		VSM0046	Skeleton Switch	2	
161(5)		VSC1046	Shield Case	1	
162(5)		VJH0287	RF & ANT Board	1	
163(5)		VMA6381	RF & ANT Unit Mount Angle	1	
164(5)		VXA1987	Cassette Comp. Angle (L)	1	
165(5)		VXA1988	Cassette Comp. Angle (R)	1	
167(5)		VGQ0558	Tuner Holder	1	NV-850E/B
168(5)		VMP0370	Top Case Support Angle (A)	3	
169(5)		VKC0055	Hinge (A)	2	
170(5)		VKA0026	Rubber Foot	4	
171(5)		VYP0901	Top Panel Unit	1	NV-850E(Silver)/
					EG(Silver)
171(5)		VYP0905	Top Panel Unit	1	NV-850E(Black)/
					EG(Black)/B
171(5)		VYP0884	Top Panel Unit	1	
172(5)	*	———	Characteristic Sticker	1	VQL2266 (Not available)
172(5)	*	———	Characteristic Sticker	1	VQL2242 (Not available)
173(5)		VKW0280	Top Smoke Board	1	
174(5)		VYF0313	Preset Cover Unit	1	NV-850E(Silver)/
					EG(Silver)
174(5)		VYF0318	Preset Cover Unit	1	NV-850E(Black)/
					EG(Black)
174(5)		VYF0353	Preset Cover Unit	1	NV-850B

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
175(5)		VJF0004	Wire Saddle	1	
176(5)		VJF0122	Wire Saddle	1	
177(5)		VJF0022.	Wire Saddle	1	
178(5)		VHD0117	Screw	4	NV-850E(Silver)/
					EG(Silver)
178(5)		VHD0143	Screw	4	NV-850E(Black)/
					EG(Black)/B
179(5)		VEJ0295	Rear Jack Unit	1	NV-850E/EG
179(5)		VEJ0313	Rear Jack Unit	1	NV-850B
181(5)		VJF0031	Wire Saddle	1	
182(5)		VMP0371	Power Transformer Angle	1	⚠
183(5)		VMT0085	Rubber Cushion	2	
184(5)		VMA6386	Earth Angle	1	
185(3,5)		VJR3	Clamper	3	
186(5)		VGH0079	Power Name Plate	1	
187(5)		VJA0111	AC Cord	1	NV-850E/EG ⚠
187(5)		VJA0112	AC Cord	1	NV-850B ⚠
188(5)		VJF0107	AC Cord Bushing	1	⚠
189(5)		VJF0139	AC Cord Clamper	1	
				1	
				1	
193(5)		VKC0102	Hinge (B)	1	
194(5)		VKC0107	Hinge (C)	1	
195(5)		VGU1027	VR Knob	3	
196(5)		VMP0403	Top Case Support Angle (B)	1	
197(5)		VHD0059	Screw	9	
198(5)		VKU0205	Bottom Plate	1	
200(5)		VGU1128	Function Select Button	1	
201(5)		VYP0898	Front Panel Unit	1	NV-850E(Silver)
201(5)		VYP0957	Front Panel Unit	1	NV-850B
201(5)		VYP0904	Front Panel Unit	1	NV-850E(Black)
201(5)		VYP0906	Front Panel Unit	1	NV-850E(Silver)
201(5)		VYP0907	Front Panel Unit	1	NV-850E(Black)
202(5)		VGU1088	Memory/Reset Button	2	
203(5)		VGQ0578	Cushion	1	
204(5)		VGU1073	Audio Dub/Rec mute Button	2	
205(5)		VGU1074	Multiplex Button	4	
206(5)		VMB1043	Button Spring (A)	4	
207(5)		VGU0595	Timer Rec Button	1	
208(5)		VMB1086	Button Spring (B)	1	
209(5)		VKC0111	Latch	1	
210(5)		VYF0315	Timer Door Unit	1	NV-850E(Silver)/
					EG(Silver)
210(5)		VYF0317	Timer Door Unit	1	NV-850E(Black)/
					EG(Black)/B
211(5)		VGQ0580	Hinge (L)	1	NV-850E(Silver)/
					EG(Silver)
211(5)		VGQ0593	Hinge (R)	1	NV-850E(Black)/
					EG(Black)/B
212(5)		VGQ0579	Hinge (R)	1	NV-850E(Silver)/
					EG(Silver)
212(5)		VGQ0592	Hinge (R)	1	NV-850E(Black)/
					EG(Black)/B
213(5)		VGQ0415	Preset VR Case	1	
214(5)		VGN1993	Preset VR Plate	1	NV-850E/EG
214(5)		VGN2054	Preset VR Plate	1	NV-850B
215(6)		VSQ0327	Remote Control Unit	1	NV-850E(Silver)/
					EG(Silver)
215(6)		VSQ0338	Remote Control Unit	1	NV-850E(Black)/
					EG(Black)/B
216(6)		VQF1157	Fan Bag Kit	1	NV-850E(Silver) ⚠
216(6)		VQF1160	Fan Bag Kit	1	NV-850E(Black) ⚠

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
216(6)		VQF1159	Fan Bag Kit	1	NV-850EG(Black)⚠
216(6)		VQF1158	Fan Bag Kit	1	NV-850B ⚠
216(6)		VQF1197	Fan Bag Kit	1	NV-850EG(Silver)⚠
217(6)		VPN0958	Cushion (L)	1	
218(6)		VPN0957	Cushion (R)	1	
219(6)		VPF0144	Polyethylene Bag	1	
220(6)		VPG1572	Packing Case	1	NV-850E(Silver)
220(6)		VPG1571	Packing Case	1	NV-850E(Black)
220(6)		VPG1619	Packing Case	1	NV-850EG(Silver)
220(6)		VPG1574	Packing Case	1	NV-850EG(Black)
220(6)		VPG1573	Packing Case	1	NV-850B
221(6)		VJA0231	Audio Cable	2	
222(6)		VJA0130	DIN RF Cable	1	
229(4)		VGQ0571	Spacer	2	
230(5)		VKC0076	Hinge(D)	2	
231(1)		VMD0369	Wire Holder	1	
232(4)		VXA2054	Cassette Holder (1) Unit	1	
233(3)		VMT0101	Stopper Cushion	1	
234(3)		VHD0146	Screw	1	
235(5)		VMP0419	Decoder P.C.B. Angle	1	
236(1)		VXA2006	Stator Angle Unit	1	
237(1)		VXA2004	RT Rotor Base Unit	1	
239(5)		VKC0083	Hinge (E)	1	
240(4)		MXN12AE10C	Front Loading Motor	1	⚠
241(5)		VMG0272	RF Converter Bushing	1	
242(5)		VMX0573	Spacer	8	
243(5)		VMX0237	AC Cord Cover	1	⚠
244(5)		VMZ0562	Barrier	1	⚠
245(5)		VSC1064	Power Heat Sink	1	
246(5)		VMB0758	Tr. Clamper	1	
247(5)		VKC0109	Hinge (F)	2	
248(5)		VJF0175	P.C. Board Supporter	1	
249(5)		VKC0068	Hinge (G)	2	
250(5)		VJF0108	Rivet	2	
251(5)		VXA2062	Barrier	1	
252(5)		VTP0105	Power Transformer	1	NV-850E/EG ⚠
252(5)		VTP0104	Power Transformer	1	NV-850B ⚠
261(7)		VYK0655	Top Case Unit	1	NV-850E(Silver)/
					EG(Silver)
261(7)		VYK0657	Top Case Unit	1	NV-850E(Black)/
					EG(Black)/B
262(7)		VJR0101	Electrode (Common)	1	
263(7)		VJR0100	Electrode (-)	1	
264(7)		VJR0099	Electrode (+)	1	
265(7)		VGU1204	Play Button	1	NV-850E(Silver)/
					EG(Silver)

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
265(7)		VGU1288	Play Button	1	NV-850E(Black)/
					EG(Black)/B
266(7)		VGU1205	Stop Button	1	NV-850E(Silver)/
					EG(Silver)
266(7)		VGU1289	Stop Button	1	NV-850E(Black)/
					EG(Black)/B
267(7)		VGU1209	FF Button	1	NV-850E(Silver)/
					EG(Silver)
267(7)		VGU1293	FF Button	1	NV-850E(Black)/
					EG(Black)/B
268(7)		VGU1208	Rew Button	1	NV-850E(Silver)/
					EG(Silver)
268(7)		VGU1292	Rew Button	1	NV-850E(Black)/
					EG(Black)/B
269(7)		VGU1207	F. Adv Button	1	NV-850E(Silver)/
					EG(Silver)
269(7)		VGU1291	F. Adv Button	1	NV-850E(Black)/
					EG(Black)/B
270(7)		VGU1206	Still Button	1	NV-850E(Silver)/
					EG(Silver)
270(7)		VGU1290	Still Button	1	NV-850E(Black)/
					EG(Black)/B
272(7)		VGU2212	Rec Button A (Red)	1	
273(7)		VGU2211	CH Select & Rec B Button	1	NV-850E(Silver)/
					EG(Silver)
273(7)		VGU1335	CH Select & Rec B Button	1	NV-850E(Black)/
					EG(Black)/B
274(7)	*	VGU1213	Power Button	1	VGU2213
275(7)	*	VGQ0601	Button Holder	1	VGU0656
276(7)		VGU1210	VTR Button	1	NV-850E(Silver)/
					EG(Silver)
276(7)		VGU1294	VTR Button	1	NV-850E(Black)/
					EG(Black)/B
277(7)		VSP0150	Rubber Contact	1	
278(7)		VKF0340	Battery Cover	1	
279(7)		VKW0297	Smoke Board	1	
280(7)		VYK0656	Bottom Case Unit	1	NV-850E(Silver)/
					EG(Silver)
280(7)		VYK0658	Bottom Case Unit	1	NV-850E(Black)/
					EG(Black)/B
281(7)	*	XTN2+5B	Screw	1	XTB2+5G
			Screws		
401(1)	*	XSN3+8BNS,XWG3BW		2	XYNV3+B8BNS
402(1)	*	XTN26+6B		1	XTN26+6G
403(1)		XYE3+BF15FZ		4	
404(1)	*	XSN3+8BVS,XWGV3FZ,XWA4BFZ		2	XYN3+F8FZS
405(1,2,3,4,5)		XTV3+8F		23	
406(1)		XSS26+6		1	
407(1,3,4,5)		XTV3+6F		7	
408(1)	*	XSN3+6BVS,XWG4FZ,XWA4BFZ		1	XYN3+F6FZS
409(1,4)	*	XSN3+4,XWA3B		3	XYN3+C4S
410(1)	*	XSN3+10BVS		1	XSN3D10FZS
411(1,3)	*	XTV3+8BFZ		3	XTV3+8FFZ
412(1)	*	XSN3+8,XWA3B		3	XYN3+C8S
413(2,4)		XYE3+EF8		1	
414(2)		XYE3+BF9FZ		2	
416(3)		XYE3+BF8FZ		1	
417(4)	*	XTV3+8BFN		4	XTS3+8F
418(4)		XTB3+8GK		4	
419(4)		XTB3+8FK		6	
420(4)	*	XYE3+EF6		1	XYE3+FE6
421(4)		XYN2+F10		2	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
422(1,5)		XTV3+8JR		5	
423(5)	*	XSN3+8S,XWA3B,XWG3		4	XYN3+F8RS
424(5)		XTV3+10GR		13	
425(5)	*	XTV4+30BFN		3	XTV4+30A
426(5)		XTV3+8G		2	
427(5)		XTV3+10JFZ		4	
428(5)		XSB3+8FZS		2	
429(5)		XTV4+15A		1	
430(5)		XTV3+8JZF		2	
431(5)		XTW3+8PR		3	
432(4)		XTV3+8FR		1	
433(4)		XYE3+EF10		2	
434(5)	*	————		0	XTS23+6J (Miss printed)
435(5)		XTV3+10G		1	
436(5)		XTV3+8F		1	
437(5)		XTV3+8J		8	
438(5)		XTV3+8GR		2	
439(1)		XYN3+A14		2	
440(1)	*	XSN3+10S,XWA3B		2	EYN3+C10
			Washers & Rings		
501(1,2,3)		XUEV4VW		14	
502(1)		XWE5		1	
503(2,3)		XUEV3VW		7	
504(2,3)		XWGV3D7G		10	
505(2)		XWGV6F9G		1	
506(2,3,4)		XWGV4D9G		6	
507(2)		XUC15FP		1	
508(2)		XWGV3D12G		1	
509(3)		XWGV4D11G		3	
510(4)		XUC3FP		7	
511(4)		XUC25FP		3	
512(2)		XWGV3D8G		2	
513(3)		XWGV3Y6G		2	
514(2)		XWGV3D54G		2	
515(3)		XWGV5Y9G		1	
516(4)		XWGV3F6G		1	

2. ELECTRICAL SECTION

Notes: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified by △ have special characteristics important for safety. When replacing any of these components, use only the original ones.
3. Unless otherwise specified,
All resistors are in OHMS (Ω), 1/4W ± 5% carbon. K=1,000Ω, M=1,000KΩ. All capacitors are in MICROFARADS (μF), ± 10% P=μμF.

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		VEP03197A	Main [Power Supply, Servo, Luminance (1), Chrominance, Audio & System Control] P.C. Board Unit	1	NV-850EG△
		VEP03197B	Main [Power Supply, Servo, Luminance (1), Chrominance, Audio & System Control] P.C. Board Unit	1	NV-850B△
		VEP03197C	Main [Power Supply, Servo, Luminance (1), Chrominance, Audio & System Control] P.C. Board Unit	1	NV-850E△
		VEP05053A	Head Amp & Luminance (2) P.C. Board Unit	1	
		VEP06212A	Operation P.C. Board Unit	1	
		VEP07186G	TV Demodulator P.C. Board Unit	1	NV-850E△
		VEP07186H	TV Demodulator P.C. Board Unit	1	NV-850B△
		VEP07193A	TV Demodulator P.C. Board Unit	1	NV-850EG△
		VEP07194A	Decoder P.C. Board Unit	1	NV-850EG
		VEP07195A	Timer P.C. Board Unit	1	NV-850E/EG
		VEP07195B	Timer P.C. Board Unit	1	NV-850B
		VEP07196A	Timer Operation P.C. Board Unit	1	NV-850E/EG
		VEP07196B	Timer Operation P.C. Board Unit	1	NV-850B
		VEP00A99A	FM Aduio Main P.C. Board Unit	1	
		VEP00B01A	FM Audio Sub P.C. Board Unit	1	NV-850EG
		VEP00B01B	FM Audio Sub P.C. Board Unit	1	NV-850B
		VEP00B01C	FM Audio Sub P.C. Board Unit	1	NV-850E
		ENC87751	RF Converter Unit	1	NV-850E/EG△
		ENC87752	RF Converter Unit	1	NV-850B△
		VJB00A53	Reel Sensor P.C. Board	1	
		VJB00A54	Loading Motor Connection P.C. Board	1	
		VJB00A55	Front Connection P.C. Board	1	
		VJB00A56	Takeup Photo Transistor P.C. Board	1	
		VJB00A82	F. Loading Motor Connection P.C. Board	1	
		VJB00A94	Supply Photo Transistor P.C. Board	1	
		VJB00A98	Rear Jack P.C. Board	1	
		VJB00B45	Heater Transformer P.C. Board	1	
		VJB00B46	Power Transistor P.C. Board	1	
		VJB00B47	Head Phone P.C. Board	1	
		VJB00B64	IR Remote Control Reciever P.C. Board	1	
		VJB00B78	Cylinder Heater P.C. Board	1	
		VJB00976	Sensor LED P.C. Board	1	
		VJB01137	Power Transformer P.C. Board	1	△
	*	VEP00C08	IR Remote Control Transmitter P.C. Board	1	VJB00C08
		VTP0105	Power Transformer	1	NV-850E/EG△
		VTP0104	Power Tansformer	1	NV-850B△
		VMZ0562	Barrier	1	△
		XTV4+8F	Screw	1	
		VJF0052	Binder	5	
		VJF0055	Binder	6	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		VEP03197A/	Main[Power Supply,Servo,		
		B/C	Luminance (1),		
			Chrominance, Audio &		
			System Control]P.C.Board		
			Unit		
			(Power Supply Section)		
			Transistors		
Q1001		2SD636		1	(Q,R,S,T) or 2SC2021M
					(Q,R,S,E)
Q1003		2SD636		1	(Q,R,S,T) or 2SC2021M
					(Q,R,S,E)
Q1102		2SD1265		1	⚠
			Diodes		
D1002		RD3.9EB1	Zener	1	
D1003,1004		MA165		2	
D1110		RD13EB3	Zener	1	
			Resistors		
R1001		ERQ14LKR39	Metal 0.39	1	⚠
R1002		ERDS2TJ471	470	1	
R1003		EVN38CA00B53	Variable 5K	1	
R1004		ERDS2TJ392	3.9K	1	
R1005		EROS2CKG3901	Metal 3.9K	1	
R1006		EROS2CKG3001	Metal 3K	1	
R1007		ERDS2TJ103	10K	1	
R1008		ERDS2TJ682	6.8K	1	
R1009		ERDS2TJ472	4.7K	1	
R1010		EROS2CKG1800	Metal 180	1	
R1102		ERDS2TJ152	1.5K	1	
			Capacitors		
C1002		ECEA0JK470	Electrolytic 6.3V 47	1	
C1003		ECEA1HU470	Electrolytic 50V 47	1	or ECEA1HS470
C1104		ECEA1CK470	Electrolytic 16V 47	1	
C1004		ECEA0JU470	Electrolytic 6.3V 47	1	
			(Servo Section)		
			Integrated Circuits		
IC2001		AN6359N		1	
IC2002		MN6168VIF		1	
IC2003		AN6356N		1	
IC2004		AN3822		1	
IC2005		AN6387		1	
IC2007		BA855		1	
IC2008		AN6342N		1	
IC2009		BA6323L		1	
IC2010		μPC358C		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Transistors		
Q2001,2002		2SD636		2	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q2003		2SB641		1	(P,Q,R,S)
					or 2SA937M(Q,R,S)
Q2004		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M (Q,R,S,E)
Q2005		2SB641		1	(P,Q,R,S)
					or 2SA937M (Q,R,S)
Q2006		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
			Combination Parts		
			(Transistor & Resistor)		
QR2001-2003		DTC144A		3	or UN1213
QR2004		DTA144A		1	or UN1113
QR2006,2007		DTC144A		2	or UN1213
QR2008,2009		DTA144A		2	or UN1113
QR2010		DTC144A		1	or UN1213
			Diodes		
D2001,2002		MA165		2	
D2003		10E1		1	or ERB1201G1
D2004		MA154WK		1	
D2005-2007		MA165		3	
D2009-2014		MA165		6	
			Resistors		
R2001		ERDS2TJ223	22K	1	
R2002		ERDS2TJ272	2.7K	1	
R2003		ERDS2TJ472	4.7K	1	
R2004		ERDS2TJ154	150K	1	
R2005		ERDS2TJ333	33K	1	
R2006		ERDS2TJ154	150K	1	
R2007		ERDS2TJ332	3.3K	1	
R2008		ERDS2TJ124	120K	1	
R2009		ERDS2TJ154	150K	1	
R2010		ERDS2TJ563	56K	1	
R2011		ERDS2TJ103	10K	1	
R2012		ERDS2TJ274	270K	1	
R2013		ERDS2TJ682	6.8K	1	
R2014		ERDS2TJ222	2.2K	1	
R2015		EVJ1EAF20B15	Variable 100K	1	
R2016		EVN61AA00B15	Variable 100K	1	
R2017		ERDS2TJ102	1K	1	
R2018		EVN61AA00B54	Variable 50K	1	
R2019		ERDS2TJ153	15K	1	
R2020		ERDS2TJ223	22K	1	
R2021		ERDS2TJ391	390	1	
R2022		ERDS2TJ563	56K	1	
R2023		ERDS2TJ473	47K	1	
R2024,2025		ERDS2TJ223	22K	2	
R2026		ERDS2TJ104	100K	1	
R2027		ERDS2TJ393	39K	1	
R2028		ERDS2TJ124	120K	1	
R2029		ERDS2TJ222	2.2K	1	
R2030,2031		ERDS2TJ103	10K	2	
R2032		ERDS2TJ562	5.6K	1	
R2033		ERDS2TJ103	10K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R2034		ERDS2TJ105	1M	1	
R2035		ERX12ANJR82	Metal 1/2W 0.82	1	
R2036		ERDS2TJ102	1K	1	
R2037		ERDS2TJ103	10K	1	
R2038-2040		ERDS2TJ224	220K	3	
R2041		ERDS2TJ181	180	1	
R2042		ERDS2TJ104	100K	1	
R2043		ERDS2TJ124	120K	1	
R2044		ERX12ANJR68	Metal 1/2W 0.68	1	
R2045-2047		ERDS2TJ150	15	3	
R2049		ERQ12HJ6R8	Metal 1/2W 6.8	1	⚠
R2050		ERDS2TJ563	56K	1	
R2055		ERDS2TJ105	1M	1	
R2056		ERDS2TJ183	18K	1	
R2057		ERDS2TJ103	10K	1	
R2058		ERDS2TJ333	33K	1	
R2059		ERDS2TJ102	1K	1	
R2060		ERDS2TJ472	4.7K	1	
R2063		ERDS2TJ102	1K	1	
R2064		ERDS2TJ184	180K	1	
R2065		ERDS2TJ473	47K	1	
R2066		EVN61AA00B54	Variable 50K	1	
R2067		ERDS2TJ184	180K	1	
R2068		ERDS2TJ154	150K	1	
R2069		ERDS2TJ683	68K	1	
R2070		ERDS2TJ184	180K	1	
R2071		EROS2CKG5102	Metal 51K	1	
R2072		EVTK4CA00B15	Variable 100K	1	
R2073		EVN3ACA00B54	Variable 50K	1	
R2074		ERDS2TJ563	56K	1	
R2075		ERDS2TJ151	150	1	
R2076		ERDS2TJ153	15K	1	
R2077		ERDS2TJ222	2.2K	1	
R2078		ERDS2TJ223	22K	1	
R2079,2080		ERDS2TJ563	56K	2	
R2081		ERDS2TJ273	27K	1	
R2082		ERDS2TJ223	22K	1	
R2083		EROS2CKG3002	Metal 30K	1	
R2084		ERDS2TJ102	1K	1	
R2085		EVN61AA00B15	Variable 100K	1	
R2087		ERDS2TJ102	1K	1	
R2088		ERDS2TJ562	5.6K	1	
R2089		ERDS2TJ472	4.7K	1	
R2090		ERDS2TJ564	560K	1	
R2091		ERDS2TJ561	560	1	
R2092		ERDS2TJ104	100K	1	
R2093		ERDS2TJ105	1M	1	
R2094		ERDS2TJ102	1K	1	
			Capacitors		
C2001		ECQV1H104JZ	Mylar 50V 0.1	1	
C2003		VCYG1E562JR	Semiconductor 25V 5600P	1	
C2004		ECEA1HK0R1	Electrolytic 50V 0.1	1	
C2005		ECQB1H223KH	Mylar 50V 0.022	1	
C2006		ECEA0JK101	Electrolytic 6.3V 100	1	
C2007		VCYG1E562JR	Semiconductor 25V 5600P	1	
C2008		ECEA1HK0R1	Electrolytic 50V 0.1	1	
C2009		ECEA0JK330	Electrolytic 6.3V 33	1	
C2010		ECEA1HK010	Electrolytic 50V 1	1	
C2011		ECQV1H334JZ	Mylar 50V 0.33	1	
C2012		ECQV1H683JZ	Mylar 50V 0.068	1	
C2013		ECKF1H472ZF	Ceramic 50V 4700P	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C2014,2015		ECEA1CK100	Electrolytic 50V 10	2	
C2016		ECEA0JK470	Electrolytic 6.3V 47	1	
C2017		ECEA10Z100	Electrolytic 10V 10	1	
C2018		ECQV1H104JZ	Mylar 50V 0.1	1	
C2019		ECEA0JK101	Electrolytic 6.3V 100	1	
C2020		ECQV1H104JZ	Mylar 50V 0.1	1	
C2021		ECEA1HK010	Electrolytic 50V 1	1	
C2022-2024		ECKF1H272KB	Ceramic 50V 2700P	3	
C2025-2027		ECEA1EK4R7	Electrolytic 25V 4.7	3	
C2028		ECKF1H222KB	Ceramic 50V 2200P	1	
C2029		VCYG1E682JR	Semiconductor 25V 6800P	1	
C2030		ECKF1H103ZF	Ceramic 50V 0.01	1	
C2031		ECEA1HKR22	Electrolytic 50V 0.22	1	
C2032		VCYG1E123JR	Semiconductor 25V 0.012	1	
C2033		ECEA1EK3R3	Electrolytic 25V 3.3	1	
C2034	*	ECEA1CK470	Electrolytic 16V 47	1	ECEA1CK470UJ
C2035-2037	*	ECEA1EN4R7S	Electrolytic 25V 4.7	3	ECEA1EN4R7SE
C2038		ECEA1HKN010	Electrolytic 50V 1	1	
C2039		ECKF1H152KB	Ceramic 50V 1500P	1	
C2040		ECEA1HK0R1	Electrolytic 50V 0.1	1	
C2041		ECQB1H222KH	Mylar 50V 2200P	1	
C2042		ECKF1H103ZF	Ceramic 50V 0.01	1	
C2046		ECEA1EKN2R2	Electrolytic 25V 2.2	1	
C2047		ECEA1HK010	Electrolytic 50V 1	1	
C2048		ECEA1CK100	Electrolytic 16V 10	1	
C2049		VCYG1E103JR	Semiconductor 25V 0.01	1	
C2050		VCYG1E123JR	Semiconductor 25V 0.012	1	
C2051		ECQV1H104JZ	Mylar 50V 0.1	1	
C2052		ECEA0JK470	Electrolytic 6.3V 47	1	
C2053		VCYG1E682JR	Semiconductor 25V 6800P	1	
C2054		ECEA16Z10	Electrolytic 16V 10	1	
C2055		VCYG1E103JR	Semiconductor 25V 0.01	1	
C2056,2057		ECQV1H124JZ	Mylar 50V 0.12	2	
C2058		ECQV1H154JZ	Mylar 50V 0.15	1	
C2059		ECQV1H124JZ	Mylar 50V 0.12	1	
C2060		ECQB1H272KH	Mylar 50V 2700P	1	
C2061		ECQB1H822KH	Mylar 50V 8200P	1	
C2062		ECQB1H682KH	Mylar 50V 6800P	1	
C2063		VCYG1E103JR	Semiconductor 25V 0.01	1	
C2064		ECEA1CK100	Electrolytic 16V 10	1	
C2065		VCYG1E103JR	Semiconductor 25V 0.01	1	
C2066		ECEA1HK010	Electrolytic 50V 1	1	
C2067		ECQB1H103KH	Mylar 50V 0.01	1	
C2068		ECQV1H104JZ	Mylar 50V 0.1	1	
C2069,2070		ECEA0JK101	Electrolytic 6.3V 100	2	
C2071		ECEA1CK470	Electrolytic 16V 47	1	
C2072		ECEA0JK101	Electrolytic 6.3V 100	1	
C2073		ECEA1EU470	Electrolytic 25V 47	1	or ECEA1ES470
			Combination Circuits		
			(Capacitor & Resistor)		
CR2001	*	EXED472M104C	4700P, 100K	1	EXED472M104T
CR2002	*	EXED223M222C	0.022, 2.2K	1	EXED223M222T
			(Luminance (1) Section)		
			Integrated Circuits		
IC3001		BA7004		1	
IC3050		AN6328		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Transistors		
Q3001		2SC2206		1	
Q3002		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q3004		2SB641		1	(P,Q,R,S,T) NV-850E/EG
Q3005		2SD636		1	(P,Q,R,S,T) NV-850E/EG
Q3006		2SD638		1	(P,Q,R,S,T) NV-850E/EG
			Combination Parts		
			(Transistor & Resistor)		
QR3001		DTC124A		1	or UN1212 NV-850E/EG
QR3002		DTC114A		1	NV-850E/EG
QR3003		DTC124A		1	or UN1212 NV-850E/EG
QR305		DTC124A		1	or UN1212
			Diodes		
D3001		MA154WK		1	
D3002		MA165		1	
D3003		MA154WK		1	
D3004,3005		MA165		2	
D3006-3008		MA165		3	
D3009-3012		MA165		4	
D3013		MA165		1	NV-850B
D3014		MA165		1	
			Resistors		
R3001		ERDS2TJ103	10K	1	
R3002		ERDS2TJ392	3.9K	1	
R3003		ERDS2TJ152	1.5K	1	
R3004		ERDS2TJ102	1K	1	
R3005		ERDS2TJ331	330	1	
R3006		ERDS2TJ103	10K	1	
R3007		ERDS2TJ223	22K	1	
R3008		ERDS2TJ822	8.2K	1	
R3009,3010		ERDS2TJ102	1K	2	
R3011		ERDS2TJ152	1.5K	1	
R3012		ERDS2TJ561	560	1	
R3013		ERDS2TJ102	1K	1	
R3015		ERDS2TJ750	75	1	
R3017		ERDS2TJ750	75	1	
R3018		EVJ1EAF20B23	Variable 2K	1	
R3019		ERDS2TJ103	10K	1	
R3020		ERDS2TJ333	33K	1	NV-850E/EG
R3024		ERDS2TJ181	180	1	NV-850E/EG
R3025		ERDS2TJ820	82	1	NV-850E/EG
R3026		ERDS2TJ563	56K	1	NV-850E/EG
R3029		ERDS2TJ822	8.2K	1	NV-850E/EG
R3030		ERDS2TJ222	2.2K	1	NV-850E/EG
R3031		ERDS2TJ472	4.7K	1	NV-850E/EG
R3032		ERDS2TJ332	3.3K	1	NV-850E/EG
R3033		ERDS2TJ821	820	1	NV-850E/EG
R3034		ERDS2TJ180	18	1	NV-850E/EG
R3035		ERDS2TJ391	390	1	NV-850E/EG
R3036		ERDS2TJ681	680	1	
R3037		ERDS2TJ271	270	1	
R3051		ERDS2TJ101	100	1	
R3052		ERDS2TJ122	1.2K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R3053		ERDS2TJ560	56	1	
R3054		ERDS2TJ680	68	1	
R3055		ERDS2TJ122	1.2K	1	
R3056		EVN61AA00B23	Variable 2K	1	
R3057		ERDS2TJ182	1.8K	1	
R3058		ERDS2TJ121	120	1	
R3059		ERDS2TJ471	470	1	
R3060		ERDS2TJ821	820	1	
R3061		ERDS2TJ102	1K	1	
R3062		ERDS2TJ391	390	1	
R3063		ERDS2TJ122	1.2K	1	
			Capacitors		
C3001		ECEA1CK100	Electrolytic 16V 10	1	
C3002		ECEA1CK470	Electrolytic 16V 47	1	
C3003		ECEA1AU331	Electrolytic 10V 330	1	or ECEA1AS331
C3004		ECEA1AKN470	Electrolytic 10V 47	1	
C3005,3006		ECEA1CK100	Electrolytic 16V 10	2	
C3007,3008		VCYG1E332KR	Semiconductor 25V 3300P	2	
C3009		ECCF1H390KC	Ceramic 50V 39P	1	
C3020		ECEA1CK330	Electrolytic 16V 33	1	NV-850E/EG
C3023		ECEA1CK330	Electrolytic 16V 33	1	NV-850E/EG
C3024		ECEA1CU101	Electrolytic 16V 100	1	or ECEA1CS101
					NV-850E/EG
C3026		ECQV1H274JZ	Mylar 50V 0.27	1	NV-850E/EG
C3051		ECEA1AK470	Electrolytic 10V 47	1	
C3052		ECEA1HK010	Electrolytic 50V 1	1	
C3053		ECEA1HKN010	Electrolytic 50V 1	1	
C3054	*	ECEA1HN010S	Electrolytic 50V 1	1	ECEA1HK010S
C3055		ECKF1H122KB	Ceramic 50V 1200P	1	
C3056		ECEA1AK470	Electrolytic 10V 47	1	
C3057		ECKF1H391KB	Ceramic 50V 390P	1	
C3058		ECCF1H680J	Ceramic 50V 68P	1	
C3059		ECKF1H331KB	Ceramic 50V 330P	1	
C3060		ECKF1H151KB	Ceramic 50V 150P	1	
C3061		ECCF1H820KC	Ceramic 50V 82P	1	
C3062,3063		ECKF1H103ZF	Ceramic 50V 0.01	2	
C3065		VCKG1H561JA	Semiconductor 50V 560P	1	
C3066		ECEA1AU221	Electrolytic 10V 220	1	or ECEA1AS221
C3067		ECCF1H470JC	Ceramic 50V 47P	1	
C3068		ECCF1H330JC	Ceramic 50V 33P	1	
C3069		ECKF1H391KB	Ceramic 50V 390P	1	
			Coils		
L3001,3002		VLQEL05F101K	100μH	2	
L3003		VLQEL05F101K	100μH	1	NV-850E/EG
L3051		VLQEL05F101K	100μH	1	
L3052		VLQEL05F6R8K	6.8μH	1	
L3053		VLQEL05F330K	33μH	1	
L3054		VLQEL05F680K	68μH	1	
L3055		VLQEL05F101K	100μH	1	
L3056		VLQEL05F680K	68μH	1	
L3057		VLQEL05F180K	18μH	1	
			Filter		
FL3001		VLF0188		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Crystal Oscillator		
X3001		VSX0099		1	
			Switch		
S3001		VSS0095		1	
			(Audio Section)		
			Integrated Cricuits		
IC4001		TA7355P		1	
IC4002		μPC1514CA		1	
IC4101		AN6262		1	
			Transistors		
Q4001		2SD639		1	(R)
Q4002		2SD655		1	(E) or (F)
Q4101		2SB745		1	(R,S,T)
Q4102		2SD636		1	(P,Q,R,S,T)
Q4105		2SD636		1	(P,Q,R,S,T)
Q4106		2SD639		1	(R)
Q4107		2SD655		1	(E,F)
			Combination Circuits		
			(Transistor & Resistor)		
QR4103,4104		DTC124A		2	or UN1212
			Diodes		
D4101,4102		MA165		2	
			Resistors		
R4001		ERDS2TJ104	100K	1	
R4002		ERDS2TJ331	330	1	
R4003		ERDS2TJ124	120K	1	
R4004		ERDS2TJ332	3.3K	1	
R4005		ERDS2TJ100	10	1	
R4006		EVN61AA00B13	Variable 1K	1	
R4007		ERDS2TJ103	10K	1	
R4008		ERDS2TJ473	47K	1	
R4009		ERDS2TJ222	2.2K	1	
R4011		ERDS2TJ123	12K	1	
R4012		ERDS2TJ103	10K	1	
R4013	*	ERDS1TJ335	1/2W 3.3M	1	ERDS1TJ335S
R4014		ERDS2TJ221	220	1	
R4015		ERDS2TJ472	4.7K	1	
R4016		ERDS2TJ182	1.8K	1	
R4017		ERDS2TJ153	15K	1	
R4018		EVN61AA00B15	Variable 100K	1	
R4019		ERDS2TJ223	22K	1	
R4021		ERDS2TJ102	1K	1	
R4023		ERDS2TJ561	560	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R4101		ERDS2TJ472	4.7K	1	
R4102		ERDS2TJ104	100K	1	
R4103		ERDS2TJ333	33K	1	
R4104		ERDS2TJ104	100K	1	
R4105		ERDS2TJ221	220	1	
R4106		ERDS2TJ223	22K	1	
R4107		ERDS2TJ103	10K	1	
R4108		ERDS2TJ473	47K	1	
R4109		ERDS2TJ332	3.3K	1	
R4112		EVK06F025B53	Variable 5K	1	
R4113		ERDS2TJ102	1K	1	
R4114		ERDS2TJ332	3.3K	1	
R4115		ERDS2TJ562	5.6K	1	
R4116		ERDS2TJ102	1K	1	
R4117		ERDS2TJ332	3.3K	1	
R4118		ERDS2TJ562	5.6K	1	
R4119,4120		ERDS2TJ102	1K	2	
R4121		ERDS2TJ224	220K	1	
R4122		ERDS2TJ223	22K	1	
R4123		ERDS2TJ473	47K	1	
R4124		ERDS2TJ223	22K	1	
R4125		ERDS2TJ333	33K	1	
R4126		ERDS2TJ102	1K	1	
R4128		ERDS2TJ102	1K	1	
R4129		ERDS2TJ473	47K	1	
			Capacitors		
C4001		ECEA1CK100	Electrolytic 16V 10	1	
C4002		ECEA1AU221	Electrolytic 10V 220	1	or ECEA1AS221
C4003		ECQB1H102KH	Mylar 50V 1000P	1	
C4004		ECEA1CK100	Electrolytic 16V 10	1	
C4005		ECEA1AK330	Electrolytic 10V 33	1	
C4006		ECQB1H333KH	Mylar 50V 0.033	1	
C4008		ECEA1HK010	Electrolytic 50V 1	1	
C4009		ECEA1AK330	Electrolytic 10V 33	1	
C4010		ECEA1CK100	Electrolytic 16V 10	1	
C4011		ECEA0JK470	Electrolytic 6.3V 47	1	
C4012	*	ECQB1H223KH	Mylar 50V 0.022	1	ECQM1H223KH
C4013		VCYG1E153KX	Semiconductor 25V 0.015	1	
C4014		ECKF1H472ZF	Ceramic 50V 4700P	1	
C4015		ECQF6222KZ	Mylar 630V 2200P	1	
C4016		ECEA1CK100	Electrolytic 16V 10	1	
C4017		ECCD2H181K	Ceramic 500V 180P	1	
C4018		ECQV1H683JZ	Mylar 50V 0.068	1	
C4019		ECEA1CU101	Electrolytic 16V 100	1	or ECEA1CS101
C4020		ECEA1CU221	Electrolytic 16V 220	1	or ECEA1CS221
C4021		ECQB1H103KH	Mylar 50V 0.01	1	
C4022		ECQB1H273KH	Mylar 50V 0.027	1	
C4023		ECQB1H103KH	Mylar 50V 0.01	1	
C4101		ECEA1CK100	Electrolytic 16V 10	1	
C4102		ECEA1CU101	Electrolytic 16V 100	1	or ECEA1CS101
C4103		ECKF1H102KB	Ceramic 50V 1000P	1	
C4104		ECEA1AK330	Electrolytic 10V 33	1	
C4105		ECEA1CK100	Electrolytic 16V 10	1	
C4106	*	ECEAEN3R3S	Electrolytic 25V 3.3	1	ECEA1EN3R3
C4107		ECQB1H153JH	Mylar 50V 0.015	1	
C4108		VCYG1E153KR	Semiconductor 25V 0.015	1	
C4109		ECQM2223KZ	Mylar 200V 0.022	1	
C4110		VCYG1E333KR	Semiconductor 25V 0.033	1	
C4111		ECEA16Z10	Electrolytic 16V 10	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Coils		
L4001		VTQ0014	10mH	1	
L4002		VLQEL05F471K	470μH	1	
L4003,4004		VTQ0014	10mH	2	
L4101	*	VLQEL05F471K	470μH	1	VLQEL06F471K
			Transformers		
T4101		EIQ7QF002B		1	or VLT0202
T4102		EIQ7QF003B		1	or VLT0201
			(System Control Section)		
			Integrated Circuits		
IC6001		MN15342VGC·3		1	
IC6002,6003		BA6209		2	
IC6004		AN6914		1	
			Transistors		
Q6001,6002		2SD636		2	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q6003		2SB819		1	(R,S)
Q6005		2SA719		1	(R,S)
Q6006		2SB641		1	(P,Q,R,S)
					or 2SA937M (Q,R,S)
Q6007		2SA719		1	(P,Q,R,S)
Q6008		2SB641		1	(P,Q,R,S)
					or 2SA937M(Q,R,S)
Q6009		2SA719		1	(P,Q,R,S)
Q6012		2SD636		1	(P,Q,R,S,T)
			Combination Circuits		
			(Transistor & Resistor)		
QR6001		DTC124A		1	or UN1212
QR6002,6003		DTC114A		2	or UN1211
QR6004		DTC114A		1	or UN1211
QR6005,6006	*	DTA124A		2	or UN1112 DTC124A
QR6008		DTA124A		1	or UN1112
QR6012,6013		DTC144A		2	or UN1213
			Diodes		
D6005		MA165		1	
D6007,6008		MA165		2	
D6011-6016		MA165		6	
D6022		MA165		1	
D6024		MA165		1	
D6029,6030		MA165		2	
D6039		MA165		1	
D6043		MA154WK		1	
D6055-6057		MA165		3	
D6058,6059		MA165		2	NV-850E/EG
D6060,6061		MA165		2	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Resistors		
R6001		ERG1ANJ680	Metal 1W 68	1	
R6002		ERDS2TJ220	22	1	
R6003		ERDS2TJ681	680	1	
R6004		ERDS2TJ332	3.3K	1	
R6005,6006		ERDS2TJ681	680	2	
R6007		ERDS2TJ332	3.3K	1	
R6008,6009		ERDS2TJ103	10K	2	
R6010		ERDS2TJ152	1.5K	1	
R6011		ERDS2TJ102	1K	1	
R6012		ERDS2TJ682	6.8K	1	
R6013		ERDS2TJ563	56K	1	
R6014		ERDS2TJ222	2.2K	1	
R6015		ERDS2TJ153	15K	1	
R6016		ERDS2TJ103	10K	1	
R6017		ERDS2TJ333	33K	1	
R6019		ERDS2TJ103	10K	1	
R6021		ERDS2TJ105	1M	1	
R6022		ERDS2TJ474	470K	1	
R6023		EROS2CKG2261	Metal 2260	1	
R6024		EROS2CKG1542	Metal 15.4K	1	
R6025		EROS2CKG1212	Metal 12.1K	1	
R6026		ERDS2TJ103	10K	1	
R6027		ERDS2TJ562	5.6K	1	
R6028		ERDS2TJ682	6.8K	1	
R6029		ERDS2TJ103	10K	1	
R6030		ERDS2TJ152	1.5K	1	
R6033		ERDS2TJ682	6.8K	1	
R6034		ERDS2TJ562	5.6K	1	
R6035		ERDS2TJ332	3.3K	1	
R6036		ERDS2TJ682	6.8K	1	
R6037		ERDS2TJ562	5.6K	1	
R6038,6039		ERDS2TJ103	10K	2	
R6040,6041		ERDS2TJ105	1M	2	
R6043		ERDS2TJ332	3.3K	1	
R6047		ERDS2TJ333	33K	1	
R6048		ERDS2TJ560	56	1	
R6050		ERDS2TJ391	390	1	
R6051		ERDS2TJ333	33K	1	
R6052		ERDS2TJ223	22K	1	
R6053		ERDS2TJ182	1.8K	1	
R6054		ERDS2TJ223	22K	1	
R6055		ERDS2TJ822	8.2K	1	
R6056-6059		ERDS2TJ223	22K	4	
R6068,6069		ERDS2TJ223	22K	2	
R6070		ERDS2TJ562	5.6K	1	
R6077		ERDS2TJ682	6.8K	1	
R6078		ERDS2TJ333	33K	1	
R6081		ERDS2TJ123	12K	1	
R6082		ERDS2TJ473	47K	1	
R6083		ERDS2TJ222	2.2K	1	
R6085		ERDS2TJ683	68K	1	NV-850E/EG
R6086		ERDS2TJ332	3.3K	1	NV-850E/EG
			Capacitors		
C6001		ECQB1H472KH	Mylar 50V 4700P	1	
C6002		ECKF1H681KB	Ceramic 50V 680P	1	
C6003,6004		ECKF1H103ZF	Ceramic 50V 0.01	2	
C6005		ECEA0JK101	Electrolytic 6.3V 100	1	
C6006		ECKF1H221KB	Ceramic 50V 220P	1	
C6007		ECEA1HK0R1	Electrolytic 50V 0.1	1	
C6008		ECKF1H103ZF	Ceramic 50V 0.01	1	
C6009		ECEA0JK470	Electrolytic 6.3V 47	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C6010		ECQB1H682JH	Mylar 50V 6800P	1	
C6011		ECQV1H184JZ	Mylar 50V 0.18	1	
C6012-6014		ECKF1H103ZF	Ceramic 50V 0.01	3	
C6015,6016		ECCF1H330JC	Ceramic 50V 33P	2	
C6019		ECKF1H103ZF	Ceramic 50V 0.01	1	
C6022,6023		ECQV1H104JZ	Mylar 50V 0.1	2	
C6024		ECEA1EK330	Electrolytic 25V 33	1	
C6029		ECEA1EK3R3	Electrolytic 25V 3.3	1	
C6030		ECEA0JK101	Electrolytic 6.3V 100	1	
C6031		ECEA1CK100	Electrolytic 16V 10	1	
			Crystal Oscillator		
X6001		VSX0082		1	
			(Chrominance Section)		
			P.C.B. Ass'y		
IC8001		VEFC007		1	
			Integrated Circuit		
IC8002		BA7025L		1	NV-850EG
			Transistors		
Q8001		2SB641		1	(P,Q,R,S,T)
					or 2SA937M(Q,R,S)
Q8003,8004		2SD636		2	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q8006		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q8007		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
					NV-850EG
Q8008,8009		2SD636		2	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
			Combination Cricuit		
			(Transistor & Resistor)		
QR8002		DTC124A		1	or UN1212 NV-850EG
QR8003,8004		DTC144A		2	or UN1213
			Diodes		
D8001		MA165		1	
D8002		MA165		1	NV-850EG
			Resistors		
R8001		ERDS2TJ272	2.7K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R8003		ERDS2TJ102	1K	1	
R8004		ERDS2TJ471	470	1	
R8005		ERDS2TJ222	2.2K	1	
R8006		ERDS2TJ103	10K	1	
R8007		ERDS2TJ105	1M	1	
R8009		ERDS2TJ182	1.8K	1	
R8010		ERDS2TJ562	5.6K	1	
R8011		ERDS2TJ272	2.7K	1	
R8012,8013		ERDS2TJ103	10K	2	
R8014		ERDS2TJ221	220	1	NV-850EG
R8015		ERDS2TJ102	1K	1	
R8016		ERDS2TJ101	100	1	
R8017		ERDS2TJ102	1K	1	
R8018		ERDS2TJ562	5.6K	1	
R8019		ERDS2TJ822	8.2K	1	
R8020		ERDS2TJ271	270	1	
R8021		ERDS2TJ122	1.2K	1	
R8022		ERDS2TJ393	39K	1	
R8023		ERDS2TJ333	33K	1	
R8024		ERDS2TJ471	470	1	
R8025		ERDS2TJ332	3.3K	1	NV-850EG
R8026		ERDS2TJ122	1.2K	1	NV-850EG
R8027		ERDS2TJ272	2.7K	1	NV-850EG
R8028,8029		ERDS2TJ103	10K	2	NV-850EG
R8030		ERDS2TJ390	39	1	NV-850EG
R8031		ERDS2TJ222	2.2K	1	NV-850EG
R8032		ERDS2TJ154	150K	1	NV-850EG
R8033		ERDS2TJ223	22K	1	NV-850EG
R8034		ERDS2TJ102	1K	1	NV-850EG
R8035		ERDS2TJ470	47	1	
R8036		ERDS2TJ104	100K	1	
R8037,8038		ERDS2TJ562	5.6K	2	
R8040		ERDS2TJ152	1.5K	1	
R8041		ERDS2TJ102	1K	1	
R8042		ERDS2TJ822	8.2K	1	
R8043		ERDS2TJ333	33K	1	
R8044		ERDS2TJ473	47K	1	
R8045		ERDS2TJ392	3.9K	1	
			Capacitors		
C8001		ECKF1H221KB	Ceramic 50V 220P	1	
C8002		ECCF1H270JC	Ceramic 50V 27P	1	
C8003		ECKF1H472ZF	Ceramic 50V 4700P	1	
C8004		ECEA1CK470	Electrolytic 16V 47	1	
C8005		ECKF1H102KB	Ceramic 50V 1000P	1	
C8006		ECQB1H223KH	Mylar 50V 0.022	1	
C8007		ECEA10Z100	Electrolytic 10V 100	1	
C8008		ECKF1H103ZF	Ceramic 50V 0.01	1	
C8009		ECKF1H471KB	Ceramic 50V 470P	1	
C8010		VCYG1E103KR	Semiconductor 25V 0.01	1	
C8011		ECQV1H154JZ	Mylar 50V 0.15	1	
C8012		ECKF1H681KB	Ceramic 50V 680P	1	NV-850EG
C8013		ECEA1CK100	Electrolytic 16V 10	1	
C8014		ECEA0JK470	Electrolytic 6.3V 47	1	
C8015		ECKF1H103ZF	Ceramic 50V 0.01	1	
C8016		ECEA0JK470	Electrolytic 6.3V 47	1	
C8017		ECKF1H103ZF	Ceramic 50V 0.01	1	NV-850EG
C8018		ECKF1H102KB	Ceramic 50V 1000P	1	NV-850EG
C8019		ECEA1AK330	Electrolytic 10V 33	1	NV-850EG
C8020		ECKF1H102KB	Ceramic 50V 1000P	1	NV-850EG
C8021		ECQV1H563JZ	Mylar 50V 0.056	1	NV-850EG
C8022		ECEA1AK330	Electrolytic 10V 33	1	NV-850EG

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C8023		ECEA0JK470	Electrolytic 6.3V 47	1	NV-850EG
C8024		ECEA1CK100	Electrolytic 16V 10	1	
C8025		ECQV1H104JZ	Mylar 50V 0.1	1	
C8026		ECKF1H103ZF	Ceramic 50V 0.01	1	
C8027		ECCF1H050CC	Ceramic 50V 5P	1	
C8028,8029	*	VCYG1C104MR	Semiconductor 16V 0.1	2	VCYG1C104MR1
C8030	*	VCYG1C104MR	Semiconductor 16V 0.1	1	NV-850EG VCYG1C104MR1
C8031		ECKF1H471KB	Ceramic 50V 470P	1	
C8032		ECKF1H821KB	Ceramic 50V 820P	1	
C8033		ECQV1H154JZ	Mylar 50V 0.15	1	
C8034		ECQB1H103KH	Mylar 50V 0.01	1	
			Coils		
L8001		VLQEL05F270K	27μH	1	
L8002		VLQEL05F470K	47μH	1	
L8003		VLQEL05F331K	330μH	1	
L8004		VLQEL05F681K	680μH	1	
L8005		VLQEL05F101K	100μH	1	
L8006		VLQEL05F681K	680μH	1	
L8008		VLQEL05F150K	15μH	1	
L8009		ELM7Q207A		1	NV-850EG
L8010		VLQEL05F101K	100μH	1	NV-850EG
L8011		VLQEL05F151K	150μH	1	
L8012		VLQEL05F470K	47μH	1	
L8013		VLQEL05F681K	680μH	1	
			Combination Circuits		
			(Capacitor & Resistor)		
CR8001		EXEP820K332C	82P, 3.3K	1	
CR8002		EXED103M821C	0.01,820	1	
			Delay Line		
DL8001		EFDBR124A13B		1	
			Filters		
FL8001		VLF0299		1	
FL8002		VLF0143		1	NV-850EG
			Crystal Oscillator		
XC8001		VSX0129A		1	or VSX0129B
			Connectors		
JSA,JSB, JSC,JSD		VJS1180	5P	4	
			Miscellaneous		
		VGU1027	VR Knob	3	
		VJF0022	Wire Saddle (Large)	1	
		VJF0052	Binder	4	
		VJJ0106	Mic Jack	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		VEP05053A	Head Amp & Luminance (2)		
			P.C. Board Unit		
			P.C.B. Ass'y		
IC3501		VEFY005		1	
			Integrated Circuit		
IC3502		AN6326N		1	
			Transistors		
Q3501		2SC2377		1	(C,D)
Q3502,3503		2SC2206		2	(A,B,C)
Q3504		2SB641		1	(P,Q,R,S,T)
					or 2SA937M(Q,R,S)
Q3505-3508		2SC2206		4	(A,B,C)
Q3509		2SD636		1	(P,Q,R,S,T)
					or 2SC2021M(Q,R,S,E)
Q3550		2SD661		1	
Q3551,3552		2SC2377		2	(C,D)
Q3562		2SC2206		1	(A,B,C)
			Diodes		
D3501		MA165		1	
D3502		RD3.3EB	Zener	1	
D3550,3551		MA165		2	
			Resistors		
R3501		ERDS2TJ102	1K	1	
R3502		ERDS2TJ152	1.5K	1	
R3503		ERDS2TJ471	470	1	
R3504		ERDS2TJ681	680	1	
R3505		ERDS2TJ122	1.2K	1	
R3508		ERDS2TJ102	1K	1	
R3509		ERDS2TJ154	150K	1	
R3510		ERDS2TJ152	1.5K	1	
R3511		ERDS2TJ392	3.9K	1	
R3512		ERDS2TJ331	330	1	
R3513		ERDS2TJ104	100K	1	
R3514		ERDS2TJ472	4.7K	1	
R3515		EROS2CKG1601	Metal 1.6K	1	
R3516		ERDS2TJ222	2.2K	1	
R3517		ERDS2TJ104	100K	1	
R3518		ERDS2TJ122	1.2K	1	
R3519		ERDS2TJ123	12K	1	
R3521		EVN61AA00B13	Variable 1K	1	
R3522		ERDS2TJ471	470	1	
R3523		EROS2CKG4700	Metal 470	1	
R3524		ERDS2TJ682	6.8K	1	
R3525		ERDS2TJ122	1.2K	1	
R3526		EROS2CKG1201	Metal 1.2K	1	
R3527		EROS2CKG2200	Metal 220	1	
R3528		ERDS2TJ100	10	1	
R3529		ERDS2TJ682	6.8K	1	
R3530,3531		ERDS2TJ560	56	2	
R3532		ERDS2TJ100	10	1	
R3533		ERDS2TJ122	1.2K	1	
R3534		ERDS2TJ820	82	1	
R3535		ERDS2TJ124	120K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R3536-3539		ERDS2TJ152	1.5K	4	
R3540		ERDS2TJ391	390	1	
R3541		ERDS2TJ102	1K	1	
R3542		ERDS2TJ561	560	1	
R3543,3544		ERDS2TJ102	1K	2	
R3545		ERDS2TJ152	1.5K	1	
R3546		ERDS2TJ391	390	1	
R3547		ERDS2TJ122	1.2K	1	
R3548,3549		ERDS2TJ102	1K	2	
R3550,3551		ERDS2TJ103	10K	2	
R3552,3553		EVN3ACA00B13	Variable 1K	2	
R3554,3555		ERDS2TJ123	12K	2	
R3556		EVN3ACA00B13	Variable 1K	1	
R3557		ERDS2TJ562	5.6K	1	
R3558		ERDS2TJ270	27	1	
R3570		ERDS2TJ102	1K	1	
R3571,3572		ERDS2TJ681	680	2	
R3573,3574		ERDS2TJ561	560	2	
R3575		EVN61AA00B23	Variable 2K	1	
			Capacitors		
C3501		ECEA1EK4R7	Electrolytic 25V 4.7	1	
C3502		ECEA1HKNR47	Electrolytic 50V 0.47	1	
C3503		ECEA1HK010	Electrolytic 50V 1	1	
C3504		ECEA0JK101	Electrolytic 6.3V 100	1	
C3505		ECCF1H120KC	Ceramic 50V 12P	1	
C3506		ECEA0JK470	Electrolytic 6.3V 47	1	
C3507		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C3508		VCYG1E103KR	Semiconductor 25V 0.01	1	
C3509		ECEA0JK101	Electrolytic 6.3V 100	1	
C3510		ECKF1H181KB	Ceramic 50V 180P	1	
C3511-3513		ECEA1HK010	Electrolytic 50V 1	3	
C3514		ECEA1EK4R7	Electrolytic 25V 4.7	1	
C3515		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C3516		ECKF1H151KB	Ceramic 50V 150P	1	
C3517		ECKF1H122KB	Ceramic 50V 1200P	1	
C3520		ECCF1H120KC	Ceramic 50V 12P	1	
C3521		VCYG1E103KR	Semiconductor 25V 0.01	1	
C3522		ECEA1CK470	Electrolytic 16V 47	1	
C3523		ECCF1H820KC	Ceramic 50V 82P	1	
C3524		ECKF1H181KB	Ceramic 50V 180P	1	
C3525	*	VCYG1E333KR	Semiconductor 25V 0.033	1	VCYG1E333KF
C3526,3527	*	VCYG1C104MR	Semiconductor 16V 0.1	2	VCYG1C104MR1
C3528		ECKF1H103ZF	Ceramic 50V 0.01	1	
C3529		ECEA50Z1	Electrolytic 50V 1	1	
C3530		ECEA1CK100	Electrolytic 16V 10	1	
C3531		ECEA1HK010	Electrolytic 50V 1	1	
C3532		ECEA1CK100	Electrolytic 16V 10	1	
C3533	*	VCYG1C104MR	Semiconductor 16V 0.1	1	VCYG1C104MR1
C3534		ECQV1H104JZ	Mylar 50V 0.1	1	
C3535		ECCF1H120KC	Ceramic 50V 12P	1	
C3536	*	VCYG1C104MR	Semiconductor 16V 0.1	1	VCYG1C104MR1
C3537		ECEA1CK100	Electrolytic 16V 10	1	
C3538		ECEA0JK470	Electrolytic 6.3V 47	1	
C3539		ECKF1H151KB	Ceramic 50V 150P	1	
C3540		VCYG1E103KR	Semiconductor 25V 0.01	1	
C3541		ECKF1H271KB	Ceramic 50V 270P	1	
C3542		VCKG1E431JA	Semiconductor 25V 430P	1	
C3543		ECCF1H560KC	Ceramic 50V 56P	1	
C3544		ECCF1H180KC	Ceramic 50V 18P	1	
C3545		VGYG1E103KR	Semiconductor 25V 0.01	1	
C3546		ECEA0JK470	Electrolytic 6.3V 47	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C3547		ECEA0JK330	Electrolytic 6.3V 33	1	
C3548		ECQB1H333KH	Mylar 50V 0.033	1	
C3549		ECCF1H560KC	Ceramic 50V 56P	1	
C3551		VCYG1C104MR	Semiconductor 16V 0.1	1	
C3554-3556		ECV1ZW40X64T	Trimmer 500V 40P	3	
C3568		ECEA0JK470	Electrolytic 6.3V 47	1	
C3569		VCKG1E391JA	Semiconductor 25V 390P	1	
C3570		VCYG1E103KR	Semiconductor 25V 0.01	1	
C3573		ECQV1H154JZ	Mylar 50V 0.15	1	
C3574		ECKF1H102ZF	Ceramic 50V 1000P	1	
C3576		ECQV1H104JZ	Mylar 50V 0.1	1	
C3577		ECCF1H150JC	Ceramic 50V 15P	1	
C3578		ECQV1H104JZ	Mylar 50V 0.1	1	
C3579		ECQV1H274JZ	Mylar 50V 0.27	1	
C3580		ECCF1H060CC	Ceramic 50V 6P	1	
C3581		ECCF1H120KC	Ceramic 50V 12P	1	
C3582,3583		ECQV1H104JZ	Mylar 50V 0.1	2	
			Coils		
L3501-3503		VLQEL05F101K	100μH	3	
L3504		VLQEL05F820K	82μH	1	
L3505		VLQEL05F151K	150μH	1	
L3506-3508		VLQEL05F101K	100μH	3	
L3509		VLQEL05F102K	1mH	1	
L3510		VLQEL05F180K	18μH	1	
L3512		VLQEL05F151K	150μH	1	
L3513		VLQEL05F471K	470μH	1	
L3514		VLQEL05F390K	39μH	1	
L3515,3516		VLQ0127	2.2μH	2	
L3550,3551		VLQEL05F150K	15μH	2	
L3565		VLQEL05F101K	100μH	1	
L3566		VLQEL05F2R2K	2.2μH	1	
			Combination Circuits		
			(Capacitor & Resistor)		
CR3501		EXEC390K222C	39P, 2.2K	1	
CR3503		EXED561K561C	560P, 560	1	
CR3504		EXED103Z682C	0.01, 6.8K	1	
			Delay Line		
DL3501		EFDVN645A43D		1	
			Filters		
FL3501		VLF0186		1	
FL3502		VLF0187		1	
			Relay		
RY3550		VSY1019		1	or VSY1022

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Connector		
P3501		VJP1229	2P	1	
			Miscellaneous		
		VGQ0474	Spacer	1	
		VJF0035	Wire Saddle	1	
		VSC1058	Shield Case (Top)	1	
		VSC1059	Shield Case (Middle)	1	
		VSC1060	Shield Case (Bottom)	1	
		VEP06212A	Operation P.C. Board Unit		
			Integrated Circuits		
IC6501		MN1450BVG		1	
IC6502,6503		BA668A		2	
			Transistors		
Q6501		2SB642		1	
Q6502-6504		2SD637		3	
			Combination Circuit		
			(Transistor & Resistor)		
QR6501,6502		DTC144A		2	or UN1213
			Diodes		
D6501		LN81RCPHL	LED	1	
D6502,6503		MA165		2	
D6504		RD7.5EB3	Zener	1	
D6506,6507		MA165		2	
D6508		MA165		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Resistors		
R6501		ERDS2TJ391	390	1	
R6502		ERDS2TJ301	300	1	
R6503		ERDS2TJ681	680	1	
R6504		ERDS2TJ122	1.2K	1	
R6505		ERDS2TJ272	2.7K	1	
R6506		ERDS2TJ472	4.7K	1	
R6507		ERDS2TJ822	8.2K	1	
R6508		ERDS2TJ183	18K	1	
R6510		ERDS2TJ333	33K	1	
R6511		ERDS2TJ623	62K	1	
R6512		ERDS2TJ152	1.5K	1	
R6515		EVN3ACA00B14	Variable 10K	1	
R6516		ERDS2TJ103	10K	1	
R6517		ERDS2TJ563	56K	1	
R6518		ERDS2TJ560	56	1	
R6519		ERDS2TJ104	100K	1	
R6520,6521		ERDS2TJ330	33	2	
R6522		ERDS2TJ223	22K	1	
R6523		ERDS2TJ103	10K	1	
R6524		ERDS2TJ223	22K	1	
R6527		ERDS2TJ223	22K	1	
R6528		ERDS2TJ473	47K	1	
R6529		ERDS2TJ223	22K	1	
R6530,6531		ERDS2TJ473	47K	2	
R6532		ERDS2TJ223	22K	1	
R6533		ERDS2TJ561	560	1	
R6534		ERDS2TJ394	390K	1	
R6536		ERDS2TJ683	68K	1	
R6537		ERDS2TJ561	560	1	
R6538		ERDS2TJ394	390K	1	
R6539		ERDS2TJ822	8.2K	1	
R6540		ERDS2TJ273	27K	1	
R6541		ERDS2TJ822	8.2K	1	
R6542		ERDS2TJ273	27K	1	
R6546		ERDS2TJ562	5.6K	1	
R6547		ERDS2TJ104	100K	1	
R6548		ERDS2TJ103	10K	1	
R6549,6550		ERDS2TJ471	470	2	
R6551		ERDS2TJ152	1.5K	1	
			Capacitors		
C6501		ECEA1HK010	Electrolytic 50V 1	1	
C6502		ECCF1H470JU	Ceramic 50V 47P	1	
C6503		ECKF1H103ZF	Ceramic 50V 0.01	1	
C6504-6506		ECEA1CK100	Electrolytic 16V 10	3	
C6507		ECEA1HK4R7	Electrolytic 50V 4.7	1	
C6508,6509		ECEA1CK100	Electrolytic 16V 10	2	
C6510		ECEA1HK4R7	Electrolytic 50V 4.7	1	
C6511		ECEA1HK010	Electrolytic 50V 1	1	
C6512		ECEA1HKNR47	Electrolytic 50V 0.47	1	
C6513		ECEA0JK101	Electrolytic 6.3V 100	1	
C6514		VCYG1E104MR1	Semiconductor 25V 0.1	1	
C6515,6516		ECKF1H103ZF	Ceramic 50V 0.01	2	
C6517		ECEA1HK010	Electrolytic 50V 1	1	
C6518,6519		ECKF1H103ZF	Ceramic 50V 0.01	2	
				1	
			Display Tubes		
DP6502		VSL0031		1	
DP6506		VSL0030		1	
			Switches		
S6502-6508		EVQQS307K		7	
S6510-6513		EVQQS307K		4	
S6514		ESD14307		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
S6515,6516		EVQQS307K		2	
			Connectors		
P6501		VJP1236	9P	1	
P6502-6505		VJP1230	3P	4	
			Miscellaneous		
		KL04	LED Spacer	1	
		VJF0052	Binder	2	
		VJF0172	Display Tube Holder	2	(For DP6506)
		VJF0183	Level Meter Display Tube	2	(For DP6502)
			Holder		
	*	———	Spacer	1	VQL322 (Not available)
		VEP07186G/H	TV Demodulator P.C. Board		NV-850E/B
			Unit		
			Integrated Circuits		
IC701		BN5115		1	VIF IC
IC751		AN5215		1	SIF IC
			Transistors		
Q701		2SD636		1	(Q,R,S,T)
					or 2SC1684(Q,R,S,T)
Q702		2SB641		1	(Q,R,S,T)
					or 2SA564(Q,R,S,T)
Q703		2SD636		1	(S,T) or 2SD637(S,T)
Q707,708		2SD636		2	(Q,R,S,T)
					or 2SC1684(Q,R,S,T)
					NV-850B
Q709		2SA564A		1	(Q,R,S,T)
					or 2SA733(K,P,Q)
					NV-850B
Q710		2SD636		1	(Q,R,S,T)
					or 2SC1684(Q,R,S,T)
					NV-850B
Q7006		2SD636		1	(Q,R,S,T)
					or 2SC1684(Q,R,S,T)
			Diodes		
D701,702		MA165		2	NV-850E

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
D703		MA165		1	
D705		10E1		1	or ERB1201G1
			Resistors		
R701		ERDS2TJ222	2.2K	1	
R702		EVN50AA00B23	Variable 2K	1	
R703		ERDS2TJ472	4.7K	1	
R704		ERDS2TJ392	3.9K	1	NV-850E
R705		EVN50AA00B23	Variable 2K	1	NV-850E
R706		ERDS2TJ222	2.2K	1	NV-850E
R707		ERDS2TJ393	39K	1	
R708		ERDS2TJ473	47K	1	
R711		ERDS2TJ274	270K	1	
R712		ERDS2TJ183	18K	1	
R713		ERDS2TJ392	3.9K	1	
R714		ERDS2TJ102	1K	1	
R715		ERDS2TJ391	390	1	
R716		ERDS2TJ561	560	1	
R717		ERDS2TJ102	1K	1	
R719		ERDS2TJ561	560	1	
R722		ERDS2TJ183	18K	1	
R723		ERDS2TJ562	5.6K	1	
R724		EROS2CKG8200	Metal 820	1	
R725		ERDS2TJ470	47	1	
R726		ERDS2TJ680	68	1	
R727		EROS2CKG1001	Metal 1K	1	
R728		EVN50AA0B14	Variable 10K	1	
R731		ERDS2TJ680	68	1	
R732		ERDS2TJ102	1K	1	
R733		ERDS2TJ270	27	1	
R734		ERDS2TJ332	3.3K	1	
R735		ERDS2TJ272	2.7K	1	
R738		ERDS2TJ561	560	1	
R740		ERDS2TJ103	10K	1	
R743		ERDS2TJ473	47K	1	NV-850B
R744-747		ERDS2TJ223	22K	4	NV-850B
R748		ERDS2TJ472	4.7K	1	NV-850B
R749		ERDS2TJ682	6.8K	1	NV-850B
R752		ERD2FCG220	Fuse Resistor 22	1	⚠
R754		ERDS2TJ681	680	1	
R755		EVN50AA00B24	Variable 20K	1	
R756		ERDS2TJ102	1K	1	
R761		ERDS2TJ102	1K	1	NV-850B
R762		ERDS2TJ271	270	1	NV-850B
R763		ERDS2TJ104	100K	1	NV-850B
R764		ERDS2T223	22K	1	NV-850B
R790		ERDS2TJ750	75	1	
R791		ERDS2TJ102	1K	1	
R7014		ERDS2TJ102	1K	1	
R7015		ERDS2TJ103	10K	1	
			Capacitors		
C701		ECEA1CK220	Electrolytic 16V 22	1	
C702		ECEA1CK100	Electrolytic 16V 10	1	
C703		ECKF1H103ZF	Ceramic 50V 0.01	1	NV-850E
C704		ECEA1CK330	Electrolytic 16V 33	1	NV-850E
C705		ECEA50ZR68	Electrolytic 50V 0.68	1	
C706		ECEA1CK330	Electrolytic 16V 33	1	
C707,708		ECKF1H103ZF	Ceramic 50V 0.01	2	
C709		ECQV1H224JZ	Mylar 50V 0.22	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C710		ECKF1H103ZF	Ceramic 50V 0.01	1	
C711,712		ECCF1H030CC	Ceramic 50V 3P	2	
C713		ECCF1H121JP	Ceramic 50V 120P	1	
C714		ECCF1H220JC	Ceramic 50V 22P	1	
C715,716		ECKF1H103ZF	Ceramic 50V 0.01	2	
C717		ECCF1H150JC	Ceramic 50V 15P	1	
C718		ECCF1H560JR	Ceramic 50V 56P	1	
C719		ECEA50Z1	Electrolytic 50V 1	1	
C720		ECKF1H103ZF	Ceramic 50V 0.01	1	
C721		ECEA1CK470	Electrolytic 16V 47	1	
C723		ECEA1EKN4R7	Electrolytic 25V 4.7	1	
C724		ECCF1H150JC	Ceramic 50V 15P	1	
C726		ECCF1H680JC	Ceramic 50V 68P	1	
C727		ECCF1H220JR	Ceramic 50V 22P	1	
C730		ECCF1H390JC	Ceramic 50V 39P	1	NV-850E
C731		ECQB1H103KH	Mylar 50V 0.01	1	
C732		ECKF1H103ZF	Ceramic 50V 0.01	1	
C733		ECCF1H151J	Ceramic 50V 150P	1	
C734		ECKF1H103ZF	Ceramic 50V 0.01	1	
C737		ECEA1CK220	Electrolytic 16V 22	1	
C739		ECKF1H103ZF	Ceramic 50V 0.01	1	
C743		ECQB1H103KH	Mylar 50V 0.01	1	
C745		ECKF1H103ZF	Ceramic 50V 0.01	1	NV-850B
C746		ECEA1CK220	Electrolytic 16V 22	1	
C747		ECKF1H103ZF	Ceramic 50V 0.01	1	NV-850B
C751		ECCF1H050CC	Ceramic 50V 5P	1	
C753		ECQV1H473JZ	Mylar 50V 0.047	1	
C754		ECEA1CU101	Electrolytic 16V 100	1	
C755		ECCF1H390JP	Ceramic 50V 39P	1	
C756		ECCF1H120JC	Ceramic 50V 12P	1	
C757		ECKF1H561KB	Ceramic 50V 560P	1	
C758		ECCF1H820JP	Ceramic 50V 82P	1	
C759		ECEA1CK100	Electrolytic 16V 10	1	
C761		ECQB1H103JH	Mylar 50V 0.01	1	
C791		ECQB1H273JH	Mylar 50V 0.027	1	
			Coils		
L701		VLQEL05F220K	22μH	1	
L703		VLQEL05F150K	15μH	1	
L704		VLQEL05F470K	47μH	1	
L705		VLQEL05F560K	56μH	1	
L706		VLQEL05F820K	82μH	1	
L707		VTQ0014	10mH	1	
			Transformers		
T701		EULHLB333		1	NV-850E
T701		EULHLB360		1	NV-850B
T702		EIM7A511	Sound Trap	1	
T703		EIV7E016F	Selective	1	
T704		EIV7E016E	AFC	1	
T751	*	EIS7E006A	SIF	1	EISE7E006A
T752		EIS7E006B	Detect	1	EISE7E006B
			Crystal Oscillators		
X702		EFCS5R5MS4	5.5MHz Filter	1	or VLF0178 NV-850E
X702		EFCS6R0MS4	6.0MHz Filter	1	or VLF0179 NV-850B
X703		EFCS5R5MW3	5.5MHz Trap	1	or VLF0182 NV-850E
X703		EFCS6R0MS4	6.0MHz Trap	1	or VLF0183 NV-850B

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Connectors		
P701		VJP1234	7P	1	
P702		VJP1229	2P	1	
P704		VJP1237	10P	1	
			Miscellaneous		
		TNV77759F2	Tuner	1	NV-850E ⚠
		TNV87359F2	Tuner	1	NV-850B ⚠
		VSC0742	Shield Case (Main)	1	
		VSC0743	Shield Case (Bottom)	1	
		VSC1052	Shield Case (Top)	1	
		VGQ0471	Top Spacer	1	
		VEP07193A	TV Demodulator P.C. Board Unit	1	NV-850EG
			Integrated Circuits		
IC703		BN5115		1	
IC705		AN5130		1	
			Transistors		
Q703		2SD637		1	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q704		2SC1687		1	
Q705		2SB642		1	(Q,R,S,T)
					or 2SA564A(Q,R,S,T)
Q706		2SD636		1	(S,T) or 2SD637(S,T)
Q707		2SD637		1	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q708		2SC1687		1	
			Diodes		
D702		MA165		1	
D704		MA165		1	
D709		MA165		1	
D710,711		10E1		2	or ERB1201G1
			Resistors		

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R710		ERDS2TJ103	10K	1	
R711		ERDS2TJ823	82K	1	
R712		ERDS2TJ103	10K	1	
R713		ERDS2TJ562	5.6K	1	
R714		EVN50AA00B23	Variable 2K	1	
R715		ERDS2TJ392	3.9K	1	
R716		ERDS2TJ562	5.6K	1	
R717		EVN50AA00B23	Variable 2K	1	
R718		ERDS2TJ562	5.6K	1	
R720		ERDS2TJ562	5.6K	1	
R721		ERDS2TJ821	820	1	
R722		ERDS2TJ470	47	1	
R723		EROS2CKG1001	Metal 1K	1	
R724		ERDS2TJ103	10K	1	
R728		ERDS2TJ183	18K	1	
R729	*	ERD25TJ225	2.2M	1	ERDS2TJ225
R730		ERDS2TJ332	3.3K	1	
R731		ERDS2TJ470	47	1	
R732		EROS2CKG8200	Metal 820	1	
R733		ERDS2TJ183	18K	1	
R734		ERDS2TJ562	5.6K	1	
R735		ERDS2TJ680	68	1	
R736		EVN50AA00B14	Variable 10K	1	
R737		ERDS2TJ102	1K	1	
R738		ERDS2TJ470	47	1	
R739		ERDS2TJ221	220	1	
R740		ERDS2TJ563	56K	1	
R741		ERDS2TJ102	1K	1	
R742		ERDS2TJ683	68K	1	
R743		ERDS2TJ122	1.2K	1	
R744		ERDS2TJ271	270	1	
R745		ERDS2TJ274	270K	1	
R747		ERDS2TJ822	8.2K	1	
R748		ERDS2TJ392	3.9K	1	
R749,750		ERDS2TJ562	5.6K	2	
R751		ERDS2TJ821	820	1	
R752		ERDS2TJ122	1.2K	1	
R755		ERDS2TJ392	3.9K	1	
R757		ERDS2TJ103	10K	1	
R760		ERDS2TJ152	1.5K	1	
R761		ERDS2TJ332	3.3K	1	
R762		ERDS2TJ471	470	1	
R763		ERDS2TJ750	75	1	
R765,766		ERDS2TJ221	220	2	
			Capacitors		
C704		ECEA1CK220	Electrolytic 16V 22	1	
C705		ECEA1CK100	Electrolytic 16V 10	1	
C706,707		ECKF1H103ŻF	Ceramic 50V 0.01	2	
C708		ECEA1CK330	Electrolytic 16V 33	1	
C709		ECQB1H103KH	Mylar 50V 0.01	1	
C710		ECEA50ZR68	Electrolytic 50V 0.68	1	
C711		ECKF1H103ZF	Ceramic 50V 0.01	1	
C712		ECEA1CK330	Electrolytic 16V 33	1	
C713		ECCF1H150JC	Ceramic 50V 15P	1	
C714,715		ECKF1H103ZF	Ceramic 50V 0.01	2	
C716		ECCF1H330JC	Ceramic 50V 33P	1	
C721-724		ECKF1H103ZF	Ceramic 50V 0.01	4	
C725		ECCF1H150JC	Ceramic 50V 15P	1	
C726		ECEA1HK010	Electrolytic 50V 1	1	
C727		ECEA1CU101	Electrolytic 16V 100	1	
C729		ECEA50Z1	Electrolytic 50V 1	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C730		ECKF1H103ZF	Ceramic 50V 0.01	1	
C731		ECEA1EKN4R7	Electrolytic 25V 4.7	1	
C732		ECCF1H220JC	Ceramic 50V 22P	1	
C734		ECCF1H680JS	Ceramic 50V 68P	1	
C735		ECCF1H820JP	Ceramic 50V 82P	1	
C736		ECCF1H220JC	Ceramic 50V 22P	1	
C737,738		ECCF1H020CC	Ceramic 50V 2P	1	
C739		ECCF1H101J	Ceramic 50V 100P	1	
C740		ECKF1H103ZF	Ceramic 50V 0.01	1	
C742		ECQB1H223KH	Mylar 50V 0.022	1	
C743		ECQV1H224JZ	Mylar 50V 0.22	1	
C744		ECCF1H050CC	Ceramic 50V 5P	1	
C745		ECCF1H560JP	Ceramic 50V 56P	1	
C746-748		ECKF1H103ZF	Ceramic 50V 0.01	3	
C749		ECKF1H102KB	Ceramic 50V 1000P	1	
C750		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C751		ECKF1H102KB	Ceramic 50V 1000P	1	
C754		ECKF1H103ZF	Ceramic 50V 0.01	1	
C755		ECEA1CK470	Electrolytic 16V 47	1	
C756		ECEA16Z10	Electrolytic 16V 10	1	
C760		ECQB1H103KH	Mylar 50V 0.01	1	
C761,762		ECEA1CK330	Electrolytic 16V 33	2	
C763		ECCF1H680JP	Ceramic 50V 68P	1	
C767,768		ECKF1H103ZF	Ceramic 50V 0.01	2	
C769		ECCF1H060CC	Ceramic 50V 6P	1	
C770		ECCF1H101JP	Ceramic 50V 100P	1	
			Coils		
L701		VLQEL05F100K	10µH	1	
L702		VLQEL05F560K	56µH	1	
L704		VLQEL05F101K	100µH	1	
L705		VLQEL05F120K	12µH	1	
L706		VLQEL05F2R2K	2.2µH	1	
L707		ELQSR56KB	0.56µH	1	
L708		VLQEL05F100K	10µH	1	
L709		VLQEL05F101K	100µH	1	
			Transformers		
T702		EULHLB318		1	
T703		EIM5A521		1	
T704		EIV7E018C	Selective	1	
T705		EIV7E016E	AFC	1	
T706		EULHLB319		1	
T707		EIV7E018C	Selective	1	
T712		EIM5A521	Trap	1	
			Crystal Oscillator		
X701		EFCS5R5MW3		1	or VLF0182
			Connectors		
P701		VJP1234	7P	1	
P702		VJP1229	2P	1	
P704		VJP1237	10P	1	
P705		VJP1232	5P	1	
P706		VJP1230	3P	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Miscellaneous		
		TNV77759F2	Tuner	1	
		VMZ0550	Barrier	1	
		VSC0902	Shield Case (Large-Top)	1	
		VSC0903	Shield Case (Large-Main)	1	
		VSC0904	Shield Case (Large-Bottom)	1	
		VSC0905	Shield Case (Small-Top)	1	
		VSC0906	Shield Case (Small-Main)	1	
		VSC0907	Shield Case (Small-Bottom)	1	
		VEP07194A	Decoder P.C. Board Unit		NV-850EG
			Integrated Circuits		
IC7001		BN5823		1	
IC7002		LA7755		1	
IC7003		TC4066BP		1	or µPD4066BC
IC7004,7005		AN5215		2	
			Transistors		
Q7001		2SD637		1	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q7002		2SB641		1	(Q,R,S,T)
					or 2SA564(Q,R,S,T)
Q7003,7004		2SD637		1	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q7005		2SB641		1	(Q,R,S,T)
					or 2SC564(Q,R,S,T)
Q7006-7016		2SD637		11	(Q,R,S,T)
					or 2SC1685(Q,R,S,T)
Q7020		2SD636		1	(Q,R,S,T)
					or 2SC1684(Q,R,S,T)
			Diodes		
D7001-7004		MA165		4	
D7005,7006		MA1082	Zener	2	or RD8.2EB2
D7007-7011		MA165		5	
D7016		MA165		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Resistors		
R7001		EVN61AA00B33	Variable 3K	1	or EVNK6AA00B33
R7002		ERDS2TJ224	220K	1	
R7003		ERDS2TJ333	33K	1	
R7004		ERDS2TJ182	1.8K	1	
R7005		ERDS2TJ152	1.5K	1	
R7006		ERDS2TJ563	56K	1	
R7007		ERDS2TJ682	6.8K	1	
R7008,7009		ERDS2TJ102	1K	2	
R7010,7011		ERDS2TJ103	10K	2	
R7012,7013		ERDS2TJ473	47K	2	
R7014		ERD2FCG220	Fuse Resistor 22	1	⚠
R7015		ERDS2TJ473	47K	1	
R7016,7017		ERDS2TJ474	470K	2	
R7018		ERDS2TJ104	100K	1	
R7019		ERDS2TJ182	1.8K	1	
R7020		ERDS2TJ273	27K	1	
R7021		ERDS2TJ102	1K	1	
R7022		ERDS2TJ333	33K	1	
R7023		ERDS2TJ104	100K	1	
R7024		ERDS2TJ103	10K	1	
R7025		ERDS2TJ104	100K	1	
R7026		EVNK6AA00B15	Variable 100K	1	or EVN61AA00B15
R7027		ERDS2TJ154	150K	1	
R7028		EVNK6AA00B54	Variable 50K	1	or EVN61AA00B54
R7029		ERDS2TJ823	82K	1	
R7030		ERDS2TJ104	100K	1	
R7031		ERDS2TJ564	560K	1	
R7032		ERDS2TJ104	100K	1	
R7033		ERDS2TJ684	680K	1	
R7034		ERD2FCG220	Fuse Resistor 22	1	⚠
R7035		ERDS2TJ124	120K	1	
R7036		ERDS2TJ683	68K	1	
R7037		ERDS2TJ102	1K	1	
R7038		ERDS2TJ222	2.2K	1	
R7039		ERDS2TJ104	100K	1	
R7040		EVN50AA00B14	Variable 10K	1	
R7041		ERDS2TJ473	47K	1	
R7042		ERDS2TJ182	1.8K	1	
R7043		ERDS2TJ104	100K	1	
R7044		EVN50AA00B14	Variable 10K	1	
R7045		ERDS2TJ473	47K	1	
R7046		ERDS2TJ104	100K	1	
R7047,7048		ERDS2TJ102	1K	2	
R7049-7053		ERDS2TJ103	10K	5	
R7054		ERDS2TJ273	27K	1	
R7055		ERDS2TJ102	1K	1	
R7056		ERDS2TJ152	1.5K	1	
R7057		ERDS2TJ103	10K	1	
R7058		ERDS2TJ273	27K	1	
R7059-7061		ERDS2TJ103	10K	3	
R7062		ERDS2TJ273	27K	1	
R7063		ERD2FCG220	Fuse Resistor 22	1	⚠
R7064		ERDS2TJ152	1.5K	1	
R7065		ERDS2TJ103	10K	1	
R7066		ERDS2TJ330	33	1	
R7067,7068		ERDS2TJ472	4.7K	2	
R7069		ERDS2TJ152	1.5K	1	
R7070		ERDS2TJ104	100K	1	
R7071-7074		ERDS2TJ471	470	4	
R7075		ERDS2TJ272	2.7K	1	
R7076		EVN50AA00B14	Variable 10K	1	
R7077		ERDS2TJ102	1K	1	
R7078		ERDS2TJ562	5.6K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R7079,7080		ERES2TJ823	82K	2	
R7081,7082		ERDS2TJ102	1K	2	
R7089		ERDS2TJ473	47K	1	
R7091		ERD2FCG220	Fuse Resistor 22	1	⚠
R7092		ERDS2TJ183	18K	1	
R7093,7094		ERDS2TJ103	10K	2	
R7095,7096		ERDS2TJ681	680	2	
			Capacitors		
C7001		ECEA1CK470	Electrolytic 16V 47	1	
C7002		ECEA0JS471	Electrolytic 6.3V 470	1	or ECEA0JU471
C7003		ECQB1H333JH	Mylar 50V 0.033	1	
C7004		ECQB1H822JH	Mylar 50V 8200P	1	
C7005		ECQB1H152JH	Mylar 50V 1500P	1	
C7006		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7007		ECQB1H223JH	Mylar 50V 0.022	1	
C7008		ECEA1CK100	Electrolytic 16V 10	1	
C7009		ECEA1CS221	Electrolytic 16V 220	1	or ECEA1CU221
C7010		ECEA1CK100	Electrolytic 16V 10	1	
C7011		ECEA0JK101	Electrolytic 6.3V 100	1	
C7012,7013		ECEA1EK4R7	Electrolytic 25V 4.7	2	
C7014,7015		ECKF1H103ZF	Ceramic 50V 0.01	2	
C7016		ECEA1CK470	Electrolytic 16V 47	1	
C7017		ECEA1CU101	Electrolytic 16V 100	1	
C7018		ECQB1H273JH	Mylar 50V 0.027	1	
C7019		ECEA1HKR47	Electrolytic 50V 0.47	1	
C7020		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C7021		ECEA1HK010	Electrolytic 50V 1	1	
C7022		ECEA1HK2R2	Electrolytic 50V 2.2	1	
C7023		ECEA1HKR47	Electrolytic 50V 0.47	1	
C7024		ECQB1H223JH	Mylar 50V 0.022	1	
C7025		ECEA1AS101	Electrolytic 10V 100	1	or ECEA1AU101
C7026-7028		ECEA1CK100	Electrolytic 16V 10	3	
C7029		ECEA1EK4R7	Electrolytic 25V 4.7	1	
C7030		ECQB1H183JH	Mylar 50V 0.018	1	
C7031		ECQB1H152JH	Mylar 50V 1500P	1	
C7032		ECQB1H153JH	Mylar 50V 0.015	1	
C7033		ECQB1H152JH	Mylar 50V 1500P	1	
C7034		ECEA1EK4R7	Electrolytic 25V 4.7	1	
C7035,7036		ECKF1H102KB	Ceramic 50V 1000P	2	
C7037		ECEA50Z1	Electrolytic 50V 1	1	
C7038,7039		ECEA1CU101	Electrolytic 16V 100	2	
C7040		ECKF1H102KB	Ceramic 50V 1000P	1	
C7041		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7042		ECEA1CK470	ELectrolytic 16V 47	1	
C7043		ECKF1H102KB	Ceramic 50V 1000P	1	
C7044		ECCF1H120JC	Ceramic 50V 12P	1	
C7045		ECKF1H102KB	Ceramic 50V 1000P	1	
C7046		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7047		ECCF1H120JC	Ceramic 50V 12P	1	
C7048		ECKF1H102KB	Ceramic 50V 1000P	1	
C7049		ECEA1CK470	Electrolytic 16V 47	1	
C7050		ECCF1H101JC	Ceramic 50V 100P	1	
C7051		ECEA1CK330	Electrolytic 16V 33	1	
C7052		ECEA1CK100	Electrolytic 16V 10	1	
C7053		ECQB1H223JH	Mylar 50V 0.022	1	
C7054		ECQB1H152JH	Mylar 50V 1500P	1	
C7055,7056		ECCF1H390JP	Ceramic 50V 39P	2	
C7057,7058		ECQB1H822JH	Mylar 50V 8200P	2	
C7091,7092		ECQB1H103JH	Mylar 50V 0.01	2	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Coils		
L7001		VLQEL05F102K	1mH	1	
L7002		VTQ0016	36mH	1	
L7003,7004		VLQEL05F102K	1mH	2	
L7010,7011		VTQ0014	10mH	2	
			Transformers		
T7001		EIR7QG001B		1	
T7002,7003		EIS7E006B		2	
			Crystal Oscillators		
X7001,7002	✱	EFCS5R5MS4		2	EFCS5R5MS4B
X7003,7004		EFCS5R74MS4B		2	
X7005,7006		ELB5A016		2	
			Connectors		
P7006		VJP1230	3P	1	
P7007		VJP1232	5P	1	
		VEP07195A/B	Timer P.C. Board Unit		
			Integrated Circuits		
IC7501		MN1455BVL		1	
IC7503		MN1512VTJ		1	
IC7504		MN1228		1	
IC7505		AN5033		1	
			Transistors		
Q7501		2SB641		1	or 2SA564, 2SA733,
					2SB642
Q7503		2SD636		1	or 2SC1684, 2SC945A,
					2SD637
Q7506		2SB641		1	or 2SA564, 2SA733,
					2SB642
Q7507,7508		2SB644		2	
Q7510		2SD637		1	or 2SC1685
Q7511		2SB642		1	
Q7513-7515		2SB642		3	
Q7520		2SD636		1	or 2SC1684, 2SC945A,
					2SD637
Q7522		2SD636		1	or 2SC1684, 2SC945A,
					2SD637
			Combination Circuit		
			(Transistor & Resistor)		
QR7503		DTC144A		1	or UN1213
QR7504		DTC114A		1	or UN1211

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Diodes		
D7501,7502		MA165		2	
D7505		LN28WPVT	LED	1	
D7506,7507		10E2		2	or ERB1202G1
D7509		MA27WB		1	
D7510		LN28WPVT	LED	1	
D7520		MA165		1	
D7521		MA165		1	NV-850E/EG
D7522		MA165		1	
D7523		LN38GCPP	LED	1	
D7550-7554		MA165		5	
D7561-7563		MA165		3	
D7574		MA165		1	
D7597		MA165		1	NV-850B
			Resistors		
R7501		ERDS2TJ122	1.2K	1	
R7502		ERC14GJ126	Solid 12M	1	
R7503,7504		ERDS2TJ102	1K	2	
R7505,7506		ERDS2TJ223	22K	2	
R7507		ERDS2TJ181	180	1	
R7508		ERDS2TJ334	330K	1	
R7509		EVNK6AA00B25	Variable 200K	1	or EVN61AA00B25
R7510		ERDS2TJ124	120K	1	
R7511		ERDS2TJ154	150K	1	
R7512		ERDS2TJ104	100K	1	
R7516		ERDS2TJ473	47K	1	
R7517		ERDS2TJ221	220	1	
R7518		ERDS2TJ105	1M	1	
R7526		ERDS2TJ104	100K	1	NV-850E/EG
R7527		ERDS2TJ104	100K	1	
R7528		ERDS2TJ103	10K	1	
R7529		ERDS2TJ473	47K	1	
R7530		ERDS2TJ104	100K	1	
R7531		ERDS2TJ124	120K	1	
R7532		ERDS2TJ122	1.2K	1	
R7533		EWEU2A016B24	Variable 20K	1	
R7534		ERDS2TJ271	270	1	
R7535		EVNK6AA00B14	Variable 10K	1	or EVN61AA00B14
R7536		ERDS2TJ103	10K	1	
R7537		ERDS2TJ473	47K	1	
R7539		ERDS2TJ390	39	1	
R7540		ERDS2TJ820	82	1	
R7541		ERDS2TJ153	15K	1	
R7542		ERDS2TJ473	47K	1	
R7546		ERDS2TJ273	27K	1	
R7547		ERDS2TJ104	100K	1	
R7548		ERDS2TJ472	4.7K	1	
R7549		ERDS2TJ104	100K	1	
R7550		ERDS2TJ391	390	1	
R7551-7556		ERDS2TJ273	27K	6	
R7557-7559		ERDS2TJ473	47K	3	
R7560		ERDS2TJ222	2.2K	1	
R7561		ERDS2TJ332	3.3K	1	
R7562		ERDS2TJ223	22K	1	
R7567		ERDS2TJ223	22K	1	
R7568		ERDS2TJ332	3.3K	1	NV-850E/EG

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R7570,7571		ERDS2TJ332	3.3K	2	
R7575		ERDS2TJ334	330K	1	NV-850E/EG
R7576		ERDS2TJ223	22K	1	
R7577		ERDS2TJ473	47K	1	
R7579		ERDS2TJ473	47K	1	
			Capacitors		
C7501		ECCF1H080DC	Ceramic 50V 8P	1	
C7502		ECV1ZW20X53T	Trimmer 500V 20P	1	
C7503		ECCF1H050CC	Ceramic 50V 5P	1	
C7504		ECCF1H330JC	Ceramic 50V 33P	1	
C7505		ECCF1H220JC	Ceramic 50V 22P	1	
C7506		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7507,7508		ECEA1HKR22	Electrolytic 50V 0.22	2	
C7510		ECEA1AK101	Electrolytic 10V 100	1	
C7511		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7512		ECEA1HKR22	Electrolytic 50V 0.22	1	
C7513,7514		ECCF1H470J	Ceramic 50V 47P	2	
C7515		ECQV1H104JZ	Mylar 50V 0.1	1	
C7516		ECQV1H683JZ	Mylar 50V 0.068	1	
C7517		ECQV1H273JZ	Mylar 50V 0.027	1	or ECQB1H273JH
C7518		ECQV1H823JZ	Mylar 50V 0.082	1	
C7519-7521		ECKF1H103ZF	Ceramic 50V 0.01	3	
C7522		ECEA1JS100	Electrolytic 63V 10	1	
C7523		ECEA1HK010	Electrolytic 50V 1	1	
C7524		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7527	*	ECEA1HK4R7	Electrolytic 50V 4.7	1	ECKF1HK4R7
C7528		ECQV1H473JZ	Mylar 50V 0.047	1	
C7530		ECEA1HK010	Electrolytic 50V 1	1	
C7531		ECEA1CK100	Electrolytic 16V 10	1	
C7532		ECEA1HK010	Electrolytic 50V 1	1	
C7533		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7540-7542		EECW2R3A3R3	Gold Capacitor 2.3V 3.3F	3	
C7543		ECEA1HK010	Electrolytic 50V 1	1	
C7550		ECCF1H101J	Ceramic 50V 100P	1	
C7553		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7554		ECKF1H103ZF	Ceramic 50V 0.01	1	
C7555		ECQV1H104JZ	Mylar 50V 0.1	1	
			Coil		
L7501		VLQEL05F102K	1mH	1	
			Crystal Oscillators		
X7501		VSX0071		1	
X7502		VSX0094		1	
X7503		VSX0082		1	
			Switches		
SW7516		VES0213		1	
SW7517		ESD14137A		1	or VSS0050 NV-850E/EG
SW7518		EVQQSB05G		1	
SW7519,7520		EVQQSB05G		2	NV-850E/EG
			Connectors		
P7501		VJP1237	10P	1	
P7503		VJP1235	8P	1	
P7505		VJP1229	2P	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Miscellaneous		
		VGQ0457	LED Spacer	1	(For D7523)
		VGT0305	VR Knob	1	
		VJF0004	Binder	1	
		VEP07196A/B	Timer Operation P.C.		
			Board Unit		
			Integrated Circuits		
IC7502		AN6873N		1	or MSL915RS
IC7506		MN1453VTN		1	
IC7580		μPC1373H		1	or μPC1373HA
			Transistors		
Q7523-7526		2SD636		4	or 2SC1684, 2SC945A,
					2SD637
Q7580		2SB641		1	or 2SA564, 2SA733,
					2SB642
Q7581		2SD636		1	or 2SC1684, 2SC945A,
					2SD637
			Combination Circuits		
			(Transistor & Resistor)		
QR7501,7502		DTA144A		2	or UN1113
QR7504		DTC114A		1	or UN1211 NV-850E/EG
			Diodes		
D7514		MA165		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
D7516-6519		MA165		4	
D7530		MA165		1	
D7531-7537		LN071175P1	LED	7	
D7570		MA165		1	
D7571		MA165		1	
D7574-7579		LN061174P	LED	6	
D7595		MA165		1	NV-850E/EG
D7596		RD5.6EB	Zener	1	or MA1056
D7598,7599		MA165		2	
			Resistors		
R7515		ERDS2TJ561	560	1	
R7519		ERDS2TJ821	820	1	
R7520,7521		ERDS2TJ561	560	2	
R7538		ERDS2TJ221	220	1	
R7563		ERDS2TJ391	390	1	
R7564		ERDS2TJ821	820	1	
R7566		ERDS2TJ561	560	1	
R7573		ERDS2TJ2R7	2.7	1	
R7578		ERDS2TJ103	10K	1	
R7580		ERDS2TJ154	150K	1	
R7581		ERDS2TJ120	12	1	
R7582		ERDS2TJ102	1K	1	
R7583		ERDS2TJ473	47K	1	
R7584		ERDS2TJ334	330K	1	
R7585		ERDS2TJ124	120K	1	
R7586		ERDS2TJ473	47K	1	
R7599		ERDS2TJ223	22K	1	
			Capacitors		
C7551	*	ECEA1CK100BJ	Electrolytic 16V 10	1	ECEA1CK100BJ
C7552	*	ECEA1HKR22BJ	Electrolytic 50V 0.22	1	ECEA1HKR22BJ
C7580		ECQV1H183JZ	Mylar 50V 0.018	1	or ECQB1H183JZ
C7581		APS472J100	Mylar 100V 4700P	1	
C7582	*	ECEA1CK100	Electrolytic 16V 10	1	ECEA1CK100BJ
C7583	*	ECEA1HKR47	Electrolytic 50V 0.47	1	ECEA1HKR47BJ
C7584	*	ECEA1CK470	Electrolytic 16V 47	1	ECEA1CK470UJ
C7585	*	ECEA1CK100	Electrolytic 16V 10	1	ECEA1CK100BJ
C7586		ECQB1H102JH	Mylar 50V 1000P	1	
C7587	*	ECKF1H331KB	Ceramic 50V 330P	1	ECKZ1H331KB
			Transformer		
T7580		ELM7Q206A		1	
			Switches		
SW7501		EVQQS307K		1	
SW7504		ESD14182		1	
SW7505-7508		EVQQS307K		4	
SW7510		EVQQS307K		1	
SW7512,7513		EVQQS307K		2	
SW7514		VSP0111		1	or ESB641
SW7521,7522		EVQQS307K		2	
SW7524		EVQQS307K		1	
SW7525		ESB65140		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Connectors		
P7504		VJP1235	8P	1	
P7506		VJP1230	3P	1	
			Display Tube		
DP7501		VSL0027		1	
			Miscellaneous		
		VGQ0417	Display Tube Holder	2	
		VGQ0458	Display Tube Spacer	2	
		VSC1087	Shield Case (Top)	1	
		VSC1088	Shield Case (Main)	1	
		VSC1089	Shield Case (Bottom)	1	
		VSC1090	Shield Case	1	
		VEP00A99A	FM Audio Main P.C. Board Unit		
			Integrated Circuits		
IC4501,4502		AN6391		2	
IC4503		AN6291		1	
IC4504		AN6326N		1	
IC4505		AN6558		1	
IC4506,4507		TA7302P		2	
IC4508		AN78N05		1	
			Transistors		
Q4501-4505		2SD636		5	
Q4506		2SD655		1	(E,F)
Q4507-4511		2SD636		5	
Q4512		2SD655		1	(E,F)
Q4513-4516		2SD636		4	
Q4520		2SC2377		1	
Q4521		2SB641		1	
Q4522		2SD636		1	
Q4523		2SB641		1	
Q4524		2SD638		1	
Q4525		2SD636		1	
Q4526		2SC2377		1	
Q4527		2SB641		1	
Q4528-4531		2SD636		4	
Q4532,4533		2SD638		2	
Q4534,4535		2SD636		2.	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Combination Circuits		
			(Transistor & Resistor)		
QR4501,4502		DTC124A		2	or UN1212
QR4505,4506		DTA124A		2	or UN1112
			Diodes		
D4501,4502		MA165		2	
D4503,4504	*	OA90		2	OA90R
D4505-4510		MA165		6	
D4511		RD4.7EB	Zener	1	
D4512		RD6.2EB	Zener	1	
D4514		MA165		1	
			Resistors		
R4501		ERDS2TJ333	33K	1	
R4502		ERDS2TJ682	6.8K	1	
R4503		EVN38CA00B23	Variable 2K	1	
R4504		ERDS2TJ392	3.9K	1	
R4505		ERDS2TJ472	4.7K	1	
R4506		ERDS2TJ104	100K	1	
R4507,4508		ERDS2TJ102	1K	2	
R4509		ERDS2TJ392	3.9K	1	
R4510		ERDS2TJ102	1K	1	
R4511		ERDS2TJ821	820	1	
R4512		ERDS2TJ331	330	1	
R4513		ERDS2TJ332	3.3K	1	
R4514		ERDS2TJ103	10K	1	
R4516		EVN61AA00B13	Variable 1K	1	
R4520,4521		ERDS2TJ473	47K	2	
R4522		ERDS2TJ272	2.7K	1	
R4523		ERDS2TJ332	3.3K	1	
R4524,4525		ERDS2TJ104	100K	2	
R4526		ERDS2TJ472	4.7K	1	
R4527		ERDS2TJ153	15K	1	
R4528		ERDS2TJ472	4.7K	1	
R4529-4531		ERDS2TJ473	47K	3	
R4532		ERDS2TJ222	2.2K	1	
R4533		ERDS2TJ103	10K	1	
R4534-4536		ERDS2TJ223	22K	3	
R4539		ERDS2TJ122	1.2K	1	
R4540		ERDS2TJ332	3.3K	1	
R4541		EVNK0AA00B25	Variable 200K	1	
R4542,4543		ERDS2TJ104	100K	2	
R4544		ERDS2TJ472	4.7K	1	
R4545		ERDS2TJ151	150	1	
R4546		ERDS2TJ472	4.7K	1	
R4547		ERDS2TJ153	15K	1	
R4548		ERDS2TJ102	1K	1	
R4550,4551		ERDS2TJ104	100K	2	
R4552		ERDS2TJ472	4.7K	1	
R4553		ERDS2TJ332	3.3K	1	
R4554		ERDS2TJ272	2.7K	1	
R4555-4559		ERDS2TJ473	47K	5	
R4560		ERDS2TJ472	4.7K	1	
R4561		ERDS2TJ153	15K	1	
R4562		ERDS2TJ222	2.2K	1	
R4563		ERDS2TJ182	1.8K	1	
R4564		ERDS2TJ103	10K	1	
R4565		ERDS2TJ223	22K	1	
R4566		ERDS2TJ103	10K	1	
R4567		ERDS2TJ182	1.8K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R4568		EVN61AA00B15	Variable 100K	1	
R4570		ERDS2TJ103	10K	1	
R4571		ERDS2TJ122	1.2K	1	
R4572		EVNK0AA00B23	Variable 2K	1	
R4573		ERDS2TJ151	150	1	
R4574		ERDS2TJ153	15K	1	
R4575		ERDS2TJ472	4.7K	1	
R4576		ERDS2TJ562	5.6K	1	
R4577		ERDS2TJ563	56K	1	
R4578		ERDS2TJ562	5.6K	1	
R4579		ERDS2TJ473	47K	1	
R4580,4581		ERDS2TJ333	33K	2	
R4582		ERDS2TJ473	47K	1	
R4583		ERDS2TJ563	56K	1	
R4584		ERDS2TJ392	3.9K	1	
R4585		ERDS2TJ472	4.7K	1	
R4586		EVNK0AA00B13	Variable 1K	1	
R4587		ERDS2TJ103	10K	1	
R4590		ERDS2TJ104	100K	1	
R4591	*	ERDS2TJ472	4.7K	1	ERDS2TK472
R4592		ERDS2TJ104	100K	1	
R4593		EVNK0AA00B25	Variable 200K	1	
R4594		ERDS2TJ332	3.3K	1	
R4595		ERDS2TJ333	33K	1	
R4596		ERDS2TJ682	6.8K	1	
R4597		EVN38CA00B23	Variable 2K	1	
R4598		ERDS2TJ272	2.7K	1	
R4600		ERDS2TJ102	1K	1	
R4603,4604		ERDS2TJ104	100K	2	
R4605-4607		ERDS2TJ102	1K	3	
R4610		ERDS2TJ272	2.7K	1	
R4612		EVN61AA00B53	Variable 5K	1	
R4613		ERDS2TJ103	10K	1	
R4614		ERDS2TJ223	22K	1	
R4615		ERDS2TJ330	33	1	
R4616		ERDS2TJ222	2.2K	1	
R4617		ERDS2TJ102	1K	1	
R4618		ERDS2TJ391	390	1	
R4619		ERDS2TJ821	820	1	
R4620,4621		ERDS2TJ220	22	2	
R4622		ERDS2TJ152	1.5K	1	
R4623		ERDS2TJ223	22K	1	
R4624		ERDS2TJ332	3.3K	1	
R4625,4626		ERDS2TJ100	10	2	
R4627		ERDS2TJ332	3.3K	1	
R4628,4629		ERDS2TJ101	100	2	
R4630		ERDS2TJ222	2.2K	1	
R4631		ERDS2TJ152	1.5K	1	
R4632,4633		ERDS2TJ222	2.2K	2	
R4634		ERDS2TJ182	1.8K	1	
R4635		ERDS2TJ222	2.2K	1	
R4636		ERDS2TJ102	1K	1	
R4637		ERDS2TJ182	1.8K	1	
R4638		ERDS2TJ222	2.2K	1	
R4639		ERDS2TJ102	1K	1	
R4641		ERDS2TJ103	10K	1	
R4642		ERDS2TJ473	47K	1	
R4643		ERDS2TJ101	100	1	
R4644		ERDS2TJ103	10K	1	
R4645		ERDS2TJ102	1K	1	
R4646		ERDS2TJ103	10K	1	
R4647		ERDS2TJ822	8.2K	1	
R4648		ERDS2TJ153	15K	1	
R4649		ERDS2TJ333	33K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R4650,4651		ERDS2TJ473	47K	2	
R4652		ERDS2TJ104	100K	1	
R4654		ERDS2TJ472	4.7K	1	
R4655,4656		ERDS2TJ182	1.8K	2	
R4657		ERDS2TJ103	10K	1	
R4659		ERDS2TJ473	47K	1	
R4661		ERDS2TJ104	100K	1	
R4662		ERDS2TJ102	1K	1	
R4663-4666		ERDS2TJ223	22K	4	
R4667,4668		ERDS2TJ102	1K	2	
R4669		ERDS2TJ473	47K	1	
R4670		ERDS2TJ474	470K	1	
R4671		ERDS2TJ561	560	1	
R4672		ERDS2TJ102	1K	1	
			Capacitors		
C4501		ECEA1CK100	Electrolytic 16V 10	1	
C4502,4503		ECEA1EK3R3	Electrolytic 25V 3.3	2	
C4504		ECCF1H101JC	Ceramic 50V 100P	1	
C4505		ECEA1CK100	Electrolytic 16V 10	1	
C4506		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4507		ECCF1H820JC	Ceramic 50V 82P	1	
C4508,4509		ECCF1H680JC	Ceramic 50V 68P	2	
C4511,4512		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4513		ECEA1CK100	Electrolytic 16V 10	1	
C4514		ECEA1CK220	Electrolytic 16V 22	1	
C4515	*	ECEA1CKN100	Eelctrolytic 16V 10	1	ECEA1CKN100J
C4516		ECQB1H103KH	Mylar 50V 0.01	1	
C4517		ECEA1CK100	Electrolytic 16V 10	1	
C4518		ECKF1H221KB	Ceramic 50V 220P	1	
C4519		ECKF1H331KB	Ceramic 50V 330P	1	
C4520		ECEA1CK100	Electrolytic 16V 10	1	
C4521		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4522,4523		ECEA1CK100	Electrolytic 16V 10	2	
C4526,4527		ECEA1CK100	Electrolytic 16V 10	2	
C4533	*	ECEA25M3R3	Electrolytic 25V 3.3	1	ECEA25M3R3B
C4534		ECQB1H223JH	Mylar 50V 0.022	1	
C4535		ECEA1CK100	Electrolytic 16V 10	1	
C4537		ECEA25M3R3	Electrolytic 25V 3.3	1	
C4538		ECQB1H123JH	Mylar 50V 0.012	1	
C4539		ECEA1CK470	Electrolytic 16V 47	1	
C4540,4541		ECEA1CK100	Electrolytic 16V 10	2	
C4542	*	ECEA10M100	Electrolytic 10V 100	1	ECEA10M101
C4543		ECQB1H472JH	Mylar 50V 4700P	1	
C4544	*	ECKF1H331K	Ceramic 50V 330P	1	ECKF1H331KB
C4545		ECQB1H123JH	Mylar 50V 0.012	1	
C4546,4547		ECEA1CK100	Electrolytic 16V 10	2	
C4548,4549		ECEA1CK330	Electrolytic 16V 33	2	
C4550		ECCF1H330KC	Ceramic 50V 33P	1	
C4551		ECEA1CK100	Electrolytic 16V 10	1	
C4552		ECQB1H103JH	Mylar 50V 0.01	1	
C4553	*	ECEA1AK330	Electrolytic 10V 33	1	ECEA1AK330BJ
C4555	*	ECEA1CK100	Electrolytic 16V 10	1	ECEA1CK100BJ
C4556	*	ECEA1CK330	Electrolytic 16V 33	1	ECEA1CK330UJ
C4557		ECCF1H330KC	Ceramic 50V 33P	1	
C4558		ECEA25M3R3	Electrolytic 25V 3.3	1	
C4560		ECQB1H123JH	Mylar 50V 0.012	1	
C4561		ECEA1CK100	Electrolytic 16V 10	1	
C4568		ECEA25M3R3	Electrolytic 25V 3.3	1	
C4569		ECEA1CK100	Electrolytic 16V 10	1	
C4570		ECQB1H223JH	Mylar 50V 0.022	1	
C4571		ECEA1CK100	Electrolytic 16V 10	1	
C4572	*	ECEA10M100	Electrolytic 10V 100	1	ECEA10M101
C4573		ECQB1H472JH	Mylar 50V 4700P	1	
C4574		ECKF1H331KB	Ceramic 50V 330P	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
C4575		ECQB1H123JH	Mylar 50V 0.012	1	
C4576,4577		ECEA1CK100	Electrolytic 16V 10	2	
C4578		ECQB1H103JH	Mylar 50V 0.01	1	
C4579,4580		ECEA1CK100	Electrolytic 16V 10	2	
C4581,4582		ECEA1EK3R3	Electrolytic 25V 3.3	2	
C4583		ECCF1H101JC	Ceramic 50V 100P	1	
C4584		ECQV1H104JZ	Mylar 50V 0.1	1	
C4585		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4586		ECCF1H820JC	Ceramic 50V 82P	1	
C4587,4588		ECCF1H470JC	Ceramic 50V 47P	2	
C4590		ECEA1CK100	Electrolytic 16V 10	1	
C4591		ECEA1CK220	Electrolytic 16V 22	1	
C4592		ECEA1CKN100	Electrolytic 16V 10	1	
C4594		ECQB1H103KH	Mylar 50V 0.01	1	
C4595		ECEA1CK100	Electrolytic 16V 10	1	
C4596		ECKF1H221KB	Ceramic 50V 220P	1	
C4597		ECKF1H331KB	Ceramic 50V 330P	1	
C4598,4599		ECEA1CK100	Electrolytic 16V 10	2	
C4602		ECEA1CK100	Eelctrolytic 16V 10	1	
C4603-4608		ECKF1H103ZF	Ceramic 50V 0.01	6	
C4609		ECEA16Z10	Electrolytic 16V 10	1	
C4610		ECEA1CK100	Electrolytic 16V 10	1	
C4611		ECEA0JK470	Electrolytic 6.3V 47	1	
C4612		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4613		ECEA1CK100	Electrolytic 16V 10	1	
C4614,4615		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4616		ECEA1CK100	Electrolytic 16V 10	1	
C4617		ECEA1HK010	Electrolytic 50V 1	1	
C4618		ECEA1CK100	Electrolytic 16V 10	1	
C4619		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4620,4621		ECQV1H473JZ	Mylar 50V 0.047	2	
C4622,4623		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4625,4626		ECQV1H473JZ	Mylar 50V 0.047	2	
C4627,4628		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4629		ECEA16Z10	Electrolytic 16V 10	1	
C4630,4631		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4632		ECEA1CK100	Electrolytic 16V 10	1	
C4633		ECEA50ZR22	Electrolytic 50V 0.22	1	
C4634		ECEA10Z47	Electrolytic 10V 47	1	
C4635		ECEA16Z47	Electrolytic 16V 47	1	
C4637		ECQB1H103JH	Mylar 50V 0.01	1	
C4638		ECEA1CK100	Electrolytic 16V 10	1	
C4639		ECQB1H103JH	Mylar 50V 0.01	1	
C4640		ECKF1H103ZF	Ceramic 50V 0.01	1	
C4641		ECEA1HK0R1	Electrolytic 50V 0.1	1	
C4642		ECEA16Z10	Electroytic 16V 10	1	
C4643,4644		ECEA1CK100	Electrolytic 16V 10	2	
C4645,4646		ECCF1H470JC	Ceramic 50V 47P	2	
C4647		ECCF1H080DC	Ceramic 50V 8P	1	
C4648		ECEA1EK4R7	Electrolytic 25V 4.7	1	
			Coils		
L4501		VLQEL05F101K	100μH	1	
L4505-4507		VLQEL05F101K	100μH	3	
L4512		VLQEL05F101K	100μH	1	
L4513		VLQEL05F471K	470μH	1	
L4514		VLQEL05F121K	120μH	1	
L4515,4516		VLQEL05F2R2K	2.2μH	2	
			Filters		
FL4501		VLF0317		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
FL4502	✱	VLF0318		1	VLF0317
FL4503,4504	✱	ELT10D001B		2	EIT1QD001B
FL4505,4506		VLF0305		2	
			Connectors		
P4502		VJP1235	8P	1	
P4505		VJP1233	6P	1	
P4506		VJP1232	5P	1	
			Miscellaneous		
		VSC1084	Shield Case (Main)	1	
		VSC1085	Shield Case (Top)	1	
		VSC1086	Shield Case (Bottom)	1	
		VJF0108	Rivet	2	
		VJF0175	P.C. Board Support	1	
		VXA2062	Barrier	1	
		VEP00B01A/B/C	FM Audio Sub P.C.Board		
			Unit		
			Integrated Circuits		
IC4301		TC9145P		1	
IC4302		TA7325P		1	
IC4303,4304		μPD4066BC		2	
IC4305		μPC4558C		1	
IC4306		BA6138		1	
IC4307		μPC4557C		1	
			Transistors		
Q4301,4302		2SD636		2	
Q4303,4304		2SD661		2	(S,T)
Q4305		2SD655		1	(E,F)
Q4306,4307		2SD661		2	(S,T)
Q4308		2SD655		1	(E,F)
Q4310,4311		2SB641		2	
Q4312		2SD636		1	
Q4313		2SB641		1	
Q4314,4315		2SD655		2	(E,F)
Q4318		2SD636		1	
			Combination Circuits		
			(Transistor & Resistor)		

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
QR4301		DTA114A		1	
QR4302-4305		DTC144A		4	
QR4306		DTC124A		1	or UN1212
			Diodes		
D4301-4304		MA165		4	
D4307-4317		MA165		11	
			Resistors		
R4301-4303		ERDS2TJ104	100K	3	
R4304		ERDS2TJ223	22K	1	
R4305		ERDS2TJ123	12K	1	
R4306		ERDS2TJ223	22K	1	
R4307		ERDS2TJ123	12K	1	
R4308		ERDS2TJ124	120K	1	
R4309		ERDS2TJ184	180K	1	
R4310		ERDS2TJ472	4.7K	1	
R4311		ERDS2TJ124	120K	1	
R4312		ERDS2TJ184	180K	1	
R4313		ERDS2TJ472	4.7K	1	
R4314,4315		ERDS2TJ223	22K	2	
R4317		ERDS2TJ151	150	1	
R4318		ERDS2TJ181	180	1	
R4319		ERDS2TJ394	390K	1	
R4320		ERDS2TJ332	3.3K	1	
R4323		ERDS2TJ223	22K	1	
R4325		ERDS2TJ151	150	1	
R4326		ERDS2TJ181	180	1	
R4327		ERDS2TJ332	3.3K	1	
R4328		ERDS2TJ394	390K	1	
R4329		EVNK0AA00B55	Variable 500K	1	
R4330,4331		ERDS2TJ104	100K	2	
R4332,4333		ERDS2TJ224	220K	2	
R4334,4335		ERDS2TJ472	4.7K	2	
R4336		ERDS2TJ273	27K	1	
R4338		ERDS2TJ473	47K	1	
R4339		ERDS2TJ474	470K	1	
R4340-4342		ERDS2TJ473	47K	3	
R4343		ERDS2TJ223	22K	1	
R4344		ERDS2TJ103	10K	1	
R4349,4350		ERDS2TJ823	82K	2	
R4351,4352		ERDS2TJ103	10K	2	
R4353,4354		ERDS2TJ473	47K	2	
R4355		ERDS2TJ223	22K	1	
R4356		ERDS2TJ221	220	1	
R4357,4358		ERDS2TJ223	22K	2	
R4360,4361		ERDS2TJ104	100K	2	
R4362		ERDS2TJ222	2.2K	1	
R4363		ERDS2TJ332	3.3K	1	
R4364		ERDS2TJ222	2.2K	1	
R4365		ERDS2TJ332	3.3K	1	
R4366		ERQ14AJ330	Metal 33	1	
R4367,4368		ERDS2TJ224	220K	2	
R4370,4371		ERDS2TJ101	100	2	
R4372		ERDS2TJ103	10K	1	
R4374		ERDS2TJ104	100K	1	
R4375		ERDS2TJ154	150K	1	
R4377		ERDS2TJ104	100K	1	
R4379		ERDS2TJ334	330K	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
R4380		ERDS2TJ333	33K	1	
R4381		ERDS2TJ154	150K	1	
R4382,4383		ERDS2TJ473	47K	2	
R4385-4387	*	ERDS2TJ473	47K	3	ERDS2T473
R4388-4392		ERDS2TJ333	33K	5	
R4394		ERDS2TJ391	390	1	
R4395		ERDS2TJ471	470	1	
R4396		ERDS2TJ391	390	1	
R4397		ERDS2TJ471	470	1	
R4398		ERDS2TJ333	33K	1	
R4399		ERDS2TJ223	22K	1	
R4400		ERDS2TJ333	33K	1	
R4401		ERDS2TJ223	22K	1	
R4402-4407		ERDS2TJ474	470K	6	
R4408		ERDS2TJ473	47K	1	
R4409		ERDS2TJ103	10K	1	
R4410,4411		ERDS2TJ223	22K	2	
R4412		ERDS2TJ102	1K	1	
R4413,4414		ERDS2TJ223	22K	2	
R4416		ERDS2TJ104	100K	1	
			Capacitors		
C4301-4306		ECEA1HK010	Electrolytic 50V 1	6	
C4307-4309		ECEA1CK100	Electrolytic 16V 10	3	
C4310		ECEA1AK330	Electrolytic 10V 33	1	
C4311		ECEA1CK100	Electrolytic 16V 10	1	
C4312		ECEA1CK101	ELectrolytic 16V 100	1	
C4313		ECEA1CK100	Electrolytic 16V 10	1	
C4314		ECEA1AK330	Electrolytic 10V 33	1	
C4315		ECEA1CK100	Electrolytic 16V 10	1	
C4316,4317		ECEA1HK010	Electrolytic 50V 1	2	
C4318		ECEA1CK101	Electrolytic 16V 100	1	
C4319,4320		ECKF1H103ZF	Ceramic 50V 0.01	2	
C4321,4322		ECEA1CK470	Electrolytic 16V 47	2	
C4323		ECEA1CK100	Electrolytic 16V 10	1	
C4324		ECEA1AU221	Electrolytic 10V 220	1	
C4325,4326		ECEA1CK100	Electrolytic 16V 10	2	
C4327		ECEA1CK470	Electrolytic 16V 47	1	
C4328		ECEA1EK100	Electrolytic 25V 10	1	
C4329-4331		ECEA1CK100	Electrolytic 16V 10	3	
C4332		ECEA1CU221	Electrolytic 16V 220	1	
C4333,4334		ECEA1AK470	Electrolytic 10V 47	2	
C4335,4336		ECEA1HK0R1	Electrolytic 50V 0.1	2	
C4337		ECEA1CK101	Electrolytic 16V 100	1	
C4338-4341	*	ECEA1CK100	Electrolytic 16V 10	4	ECEA1CK100BJ
C4343,4344		ECEA1CK100	Electrolytic 16V 10	2	
C4345,4346		ECEA1HK3R3	Electrolytic 50V 3.3	2	
			Connectors		
P4301		VJP1245	5P	1	
P4303		VJP1245	5P	1	
P4305		VJP1245	5P	1	
P4307		VJP1247	7P	1	
P4308		VJP1243	3P	1	
P4309		VJP1245	5P	1	
P4310,4311		VJP1243	3P	2	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		ENC87751	RF Converter Unit		
		/ENC87752			
			Integrated Circuit		
IC1		AN3130		1	
			Transistors		
Q1		2SC2480		1	(UO-1)
Q2,3		2SC2570		1	or 2SC2671
			Diodes		
D1,2		1SS174		2	or 1SS86
D3,4		1SS135		2	or MA161
D5		MA161		1	NV-850B
			Resistors		
R1		ERJ8GC391	Chip 390	1	
R2		ERD10TJ681	1/8W 680	1	
R3		EVN38CA00B14	Variable 10K	1	
R4		ERD25FJ121	Metal 120	1	
R5		ERD10TJ823	1/8W 82K	1	
R6		ERJ8GCS682	Chip 6.8K	1	
R7		ERD10TJ682	1/8W 6.8K	1	NV-850E/EG
R7		ERD10TJ472	1/8W 4.7K	1	NV-850B
R8		ERJ8GCJ273	Chip 27K	1	
R9		ERJ8GCJ101	Chip 100	1	
R10		ERD10TJ221	1/8W 220	1	
R11		ERD10TJ470	1/8W 47	1	
R12		ERD10TJ680	1/8W 68	1	
R16		ERJ8GCJ101	Chip 100	1	
R17,18		ERD10TJ151	1/8W 150	2	
R19		ERJ8GCS332	Chip 3.3K	1	
R20		ERJ8GCS471	Chip 470	1	
R21		ERJ8GCS150	Chip 15	1	
R23		ERJ8GCS331	Chip 330	1	
R24		ERJ8GCS561	Chip 560	1	
R25		ERD10TJ390	1/8W 39	1	
R26		ERD10TJ182	1/8W 1.8K	1	
R27		ERJ8GCS471	Chip 470	1	
R28		ERJ8GCS180	Chip 18	1	
R29		ERD10TJ331	1/8W 330	1	
R30		ERJ8GCS390	Chip 39	1	
R31		ERD10TJ750	1/8W 75	1	
R32		ERD10TJ561	1/8W 560	1	
R33		ERD10TJ273	1/8W 27K	1	NV-850B
R34		ERD10TJ271	1/8W 270	1	
R35		ERJ8GCS271	Chip 270	1	
R36		ERD10TJ271	1/8W 270	1	
R37		ERJ8GCS271	Chip 270	1	
R38		ERJ8GCS122	Chip 1.2K	1	
R39		ERD10TJ221	1/8W 220	1	
R40		ERD10TJ000	0	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Switch		
SW1		ESD14515		1	
			Connectors		
P1		VJP1244	4P	1	
P2		VJP1243	3P	1	

NOTE:
The capacitors, Filters, Transformers
for the RF Converter Unit are not
available as spare parts.

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
	VJB00A53	Reel Sensor P.C. Board		
IC1501	ON2160	Photo Interrupter	1	
	VMX0645	Sensor Spacer	1	
	VJB00A54	Loading Motor Connection		
		P.C. Board		
		Capacitor		
C1504	VCYF1C333MR	Semiconductor 16V 0.033	1	
		Connectors		
P1512	VJP1246	6P	1	
P1513	VJP1242	2P	1	
P1514	VJP1229	2P	1	
P1515	VJP1242	2P	1	
	VJB00A55	Front Connection P.C.		
		Board		
		Connectors		
P1508	VJP1246	6P	1	
P1509	VJP1242	2P	1	
P1510	VJP1244	4P	1	
P1511	VJP1243	3P	1	
	VJB00A56	Takeup Photo Transistor		
		P.C. Board		
		Transistor		
Q6552	PN150NV	Photo Transistor	1	
	VMD0091	Transistor Holder	1	
	VJB00A82	Front Loading Motor		
		Connection P.C. Board		
		Capacitor		
C1503	ECKF1H102KB	Ceramic 50V 1000P	1	
		Switches		
	VSM0046		2	Cassette Up/Down SW
	VSM0047		1	Cassette In SW

Ref. No.	Part No.	Part Name & Description	Pcs / Set	Remarks
		Connector		
P1507	VJP1248	8P	1	
	VJB00A94	Supply Photo Transistor		
		P.C. Board		
		Transistor		
Q1502	PN150NV	Photo Transistor	1	
		Capacitor		
C1502	ECKF1H102KB	Ceramic 50V 1000P	1	
	VMD0091	Transistor Holder	1	
	VJB00A98	Rear Jack P.C. Board		
		Resistors		
R1401	ERDS2TJ560	56	1	
R1402	ERDS2TJ271	270	1	NV-850E/EG
R1402	ERDS2TJ101	100	1	NV-850E
R1403	ERDS2TJ560	56	1	
R1404	ERDS2TJ271	270	1	NV-850E/EG
R1404	ERDS2TJ101	100	1	NV-850E
R1405,1406	ERDS2TJ101	100	2	NV-850E/EG
		Capacitors		
C1401,1402	ECKF1H222KB	Ceramic 50V 2200P	2	
		Switchs		
S1401	ESD14130		1	
S1402	ESD14161		1	NV-850E/EG
S1402	ESD14130		1	NV-850E
		Connectors		
P3001	VJP1242	2P	1	
P3002	VJP1243	3P	1	
P3003	VJP1244	4P	1	
P3004	VJP1243	3P	1	NV-850E/EG
P4302	VJP1244	4P	1	NV-850E/EG
P4304	VJP1246	6P	1	
P4306	VJP1243	3P	1	
P4401	VJP1243	3P	1	
		Miscellaneous		
	XTV3+8G	Screw	3	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
		VJB00B45	Heater Transformer P.C.		
			Board		
			Transistor		
Q1201		2SD638		1	
			Diode		
D1201		RD15EB	Zener	1	
			Resistor		
R1201		ERDS2TJ222	2.2K	1	
			Transformer		
	*	ETE24Y1AX	Heater Transformer	1	TE3045T
			Connector		
P1011		VJP1230	3P	1	
		VJB00B46	Power Transistor P.C.		
			Board		
			Transistors		
Q1002		2SD1275		1	⚠
Q1101		2SD1265		1	⚠
			Capacitors		
C1201,1202		ECKF1H103ZF	Ceramic 50V 0.01	2	
			Connectors		
P1005		VJP1243	3P	1	
P1006		VJP1244	4P	1	
			Miscellaneous		
		VSC1064	Power Heat Sink	1	
		XTV3+8J	Screw	3	
		VJB00B64	IR Remote Control		
			Receiver P.C. Board		
			Diode		
D7580		PN313		1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Connector		
P7580		VJP1224	2P	1	
		VJB00B78	Cylinder Heater P.C.		
			Board		
			Transistor		
Q1501		2SD1275		1	⚠
			Capacitor		
C1501		ECKF1H103ZF	Ceramic 50V 0.01	1	
			Connector		
P1506		VJP1243	3P	1	
		VJB00976	Sensor LED P.C. Board		
D1501		GL450	LED	1	or LN59
		VMD0465	LED Holder	1	
		VJB01137	Power Transformer P.C.		
			Board		
			Transistor		
Q1103		2SA684		1	⚠
			Diodes		
D1101-1104		10E1		4	⚠
D1105		RD6.8EB	Zener	1	
D1106-1109		10E1		4	⚠
D1111,1112		10E2		2	⚠
D1113		RD30EB	Zener	1	or EQA0230C
			Resistors		
R1101		ERDS2TJ391	390	1	
R1103		ERQ14LK1R5	Metal 1.5	1	⚠
R1104		ERDS2TJ392	3.9K	1	
			Capacitors		
C1101		ECEA1CU332	Electrolytic 16V 3300	1	
C1102		ECEA1CU470	Electrolytic 16V 47	1	
C1103		ECEA1EU332	Electrolytic 25V 3300	1	
C1105,1106		ECEA1JU101	Electrolytic 63V 100	2	
C1107		ECEA1HU470	Electrolytic 50V 47	1	
C1108		ECKF1H103ZF	Ceramic 50V 0.01	1	

Ref. No.		Part No.	Part Name & Description	Pcs / Set	Remarks
			Fuses		
F1101		XBA2C05TR0C	500mA	1	⚠
F1102,1103		XBA2C16TR0C	1.6A	2	⚠
			Connectors		
P1001		VJP1231	4P	1	
P1002		VJP1230	3P	1	
P1003		VJP1141	2P	1	
P1004		VJP1231	4P	1	
P7502		VJP1234	7P	1	
			Miscellaneous		
		VJF0052	Binder	1	
		VMX0237	AC Cord Cover	1	⚠
		VGH0079	Power Name Plate	1	
		VJA0111	AC Cord	1	NV-850E/EG⚠
		VJA0112	AC Cord	1	NV-850B⚠
		VMP0371	Transformer Angle	1	⚠
		VJF0107	Bushing	1	⚠
		SJT777	AC Cord Clamp Pin	2	⚠
		TJC6320	Fuse Holder	6	⚠
	*	———	Spacer	1	VQL322 (Not available)
	*	VEP00C08	IR Remote Control Transmitter P.C. Board		VJB00C08
			Integrated Circuit		
IC1		MN6030B		1	
			Transistor		
Q1		2SD1458		1	
			Diodes		
D1		LN66	LED	1	or SE303A
D3		MA154WK		1	
			Resistors		
R1		ERDS2TJ102	1K	1	
R2		ERDS2TJ473	47K	1	
R3		ERDS2TJ1R0	1	1	
			Capacitors		
C1		ECKF1H471KB	Ceramic 50V 470P	1	
C2		ECKF1H121KB	Ceramic 50V 120P	1	
C3		ECEA0JK101	Electrolytic 6.3V 100	1	
			Crystal Oscillator		
X1		CSB420PB1		1	or EF0K420K05F1
			Switch		
SW1		ESD14126		1	

Panasonic
MATSUSHITA ELECTRIC

Printed in Japan

Order No. VRD-SS-403-5

Service Manual

Effective From: VEP06190B1 ..... C4HK.....(AG-6200/6100)
C4HL.....(AG-6800)
VEP02181A/B/C .. D4HK00001(AG-6200/6100)
D4HL00001(AG-6800)

VHS Video Cassette Recorder
Model No. AG-6200/6100-E/B/A/EN
AG-6800-E/B/A/EN

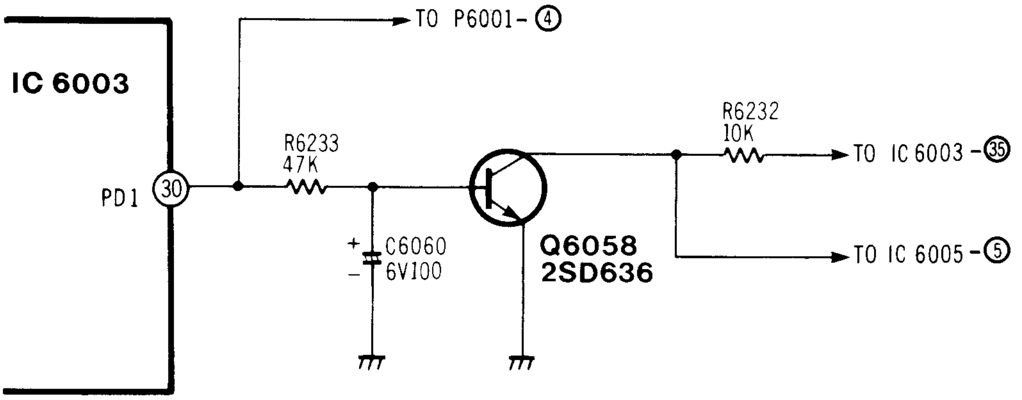
Supplement

Subject: Change of the System Control C.B.A. and Servo C.B.A.

Please use this manual together with the Service Manual for Model No. AG-6200/6100 and AG-6800
Order No. VRD-8309-484(AG-6200/6100-E/B/A/EN), VRD-8312-499(AG-6800-E/B/A/EN)

The System Control circuit board and Servo circuit board of Models AG-6200/6100/6800-E/B/A/EN have been modified to impove reliability. The parts tentatively put on the foil side of the System Control and Servo circuit boards will be installed onto the component side. Since the early type C.B.A. is compatible with the new type C.B.A., the board numbers have not been changed. However, following countermeasures have been introduced to the new System Control C.B.A. (VEP06190B1).

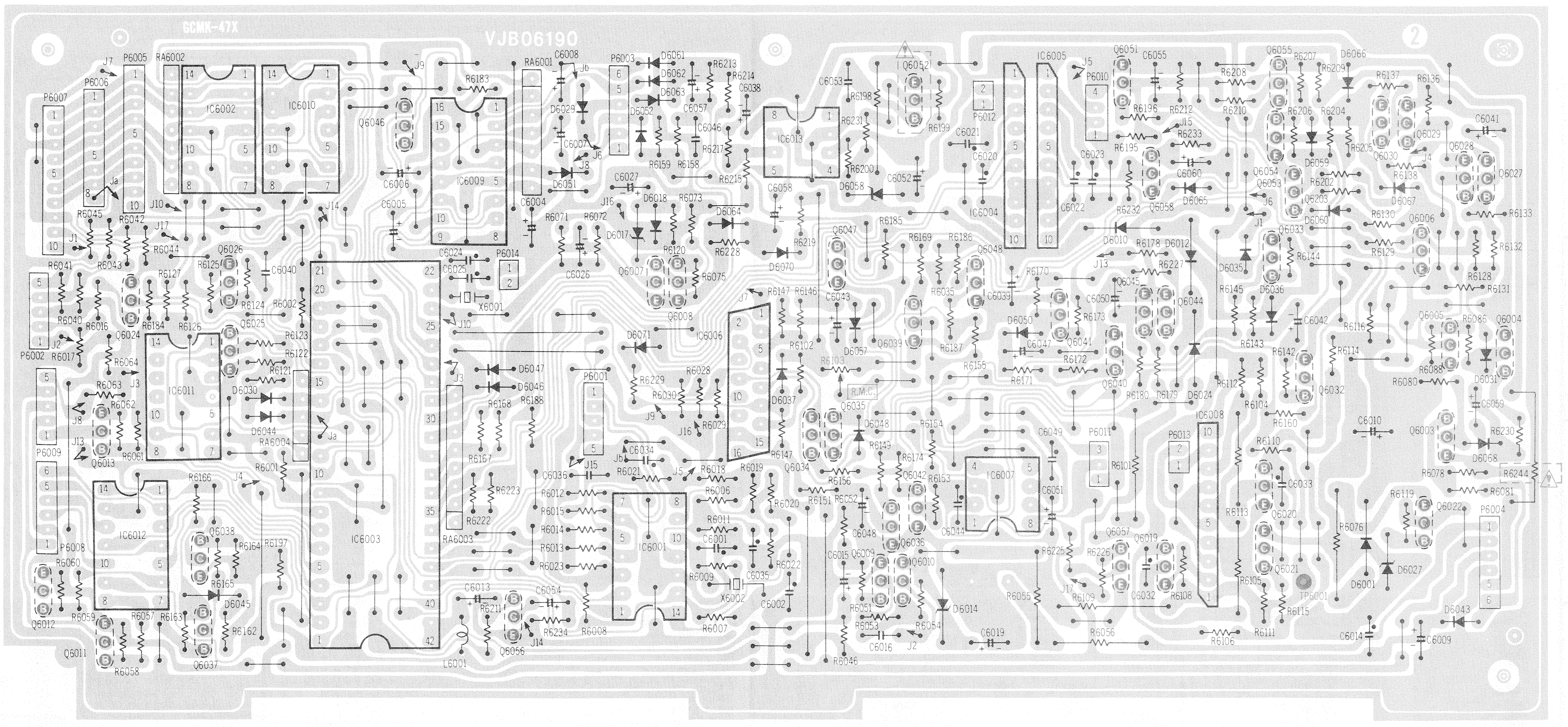
* When the Play Key is pressed immediately after the cassette tape is inserted, the tape may sub-load before cassette down is completed.
To prevent this, the System Control Circuit has been changed as shown below.



National/Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

SYSTEM CONTROL C.B.A. (VEP06190B1)


GCMK-47X
VJB06190
IC6002
IC6010
IC6009
IC6013
IC6005
IC6004
IC6011
IC6012
IC6003
IC6001
IC6006
IC6007
IC6008
P6001
P6002
P6003
P6004
P6005
P6006
P6007
P6008
P6009
P6010
P6011
P6012
P6013
P6014
RA6001
RA6002
RA6003
RA6004
X6001
X6002
L6001
TP6001
R.M.C.

P6008 TO AUDIO 1

1	REC EE 12V
2	REC PLAY 12V
3	DUB EE Ⓛ
4	DUB R/P Ⓛ
5	SLOW Ⓛ
6	X2～X10 Ⓛ

P6009 TO LUMINANCE & CHROMINANCE

1	PLAY 12V
2	R/P 12V
3	EE 12V
4	GND
5	NTSC Ⓗ

P6007 TO SERVO

1	IRQ
2	ADDRESS
3	GND
4	SERIAL CLOCK
5	SERIAL DATA
6	POWER RESET
7	CTL PULSE
8	REEL MOTOR CTL
9	CLEAR TAPE Ⓗ
10	POWER OFF Ⓗ

P6006 TO 34P CONTROL,SERVO

1	IRQ
2	ADDRESS
3	GND
4	SERIAL CLOCK
5	SERIAL DATA
6	POWER RESET
7	CTL PULSE
8	DEW SENSOR Ⓛ

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SPECIFIED PARTS.

P6005 TO FRONT CPU

1	$\overline{\text{IRQ}}$
2	$\overline{\text{ADDRESS}}$
3	GND
4	SERIAL CLOCK
5	SERIAL DATA
6	POWER RESET
7	CTL PULSE
8	SUPPLY HALL IC
9	TAKEUP HALL IC
10	———

P6003 TO FRONT CONNE., AUDIO (2)

1	EJECT POSITION
2	NTSC Ⓗ
3	STOP POSITION
4	FF/REW POSITION
5	REV POSITION
6	PLAY POSITION

P6004 TO POWER SUPPLY

1	UNREG 20V
2	REG+12V
3	REG+5V
4	GND
5	UNREG 16V
6	POWER OFF

P6001 TO FRONT LOADING CONN.

1	SUPPLY PHOTO
2	TAKEUP PHOTO
3	UP SW
4	DOWN SW
5	GND

P6002 TO MECHANISM CONN.

1	LED A
2	LED K
3	12V
4	SUPPLY HALL IC
5	TAKEUP HALL IC

P6010 TO MECHANISM CONN.

1	LOADING MOTOR ⊕
2	LOADING MOTOR ⊖
3	DEW SENSOR
4	GND

P6011 TO POWER&REEL DRIVE TR.

1	REEL DRIVE TR. E
2	REEL DRIVE TR. C
3	REEL DRIVE TR. B

P6012 TO FRONT LOADING CONN.

1	FRONT LOADING MOTOR ⊕
2	FRONT LOADING MOTOR ⊖

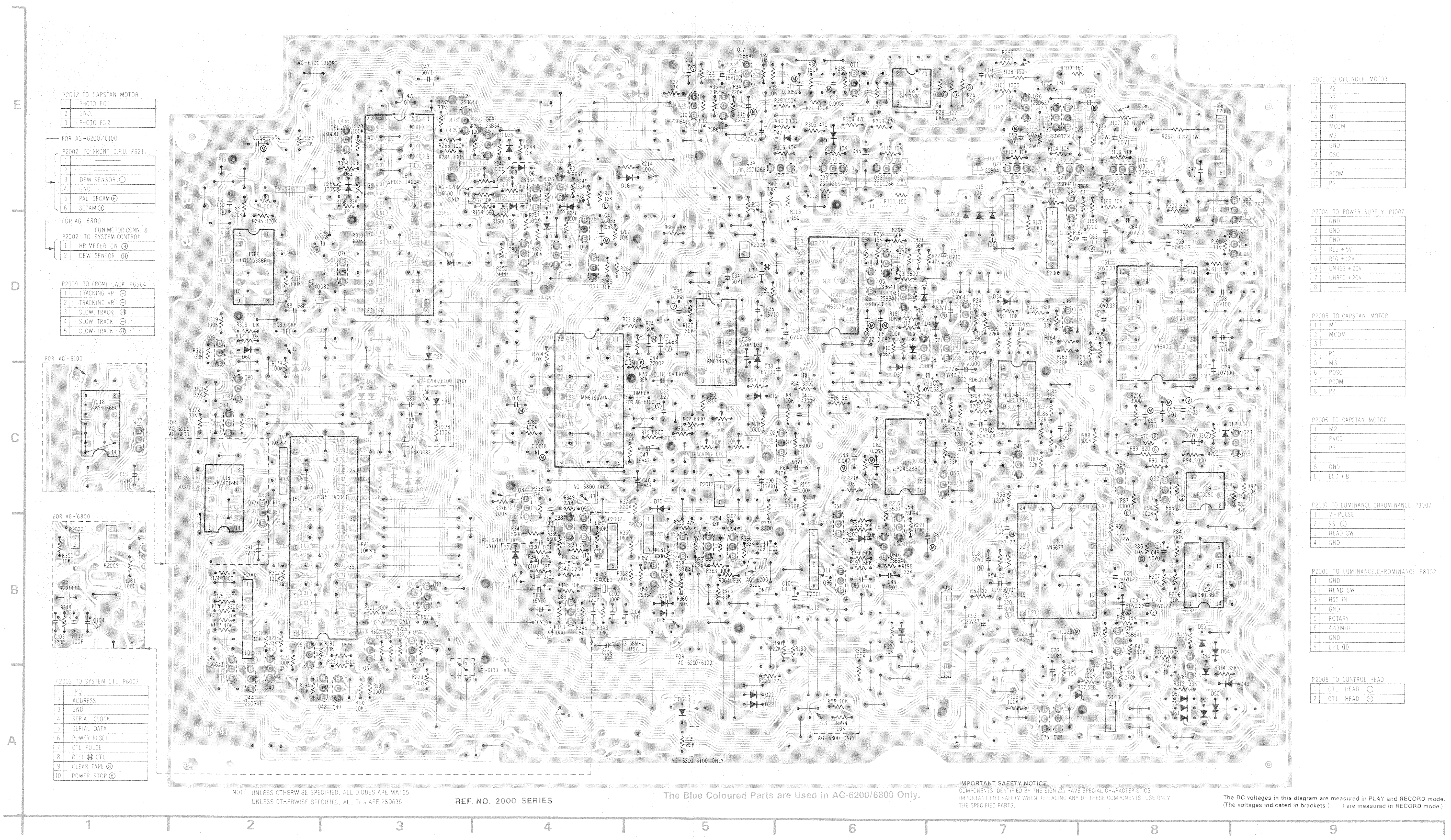
P6013 TO FRONT CONNECTION

1	REEL MOTOR ⊕
2	REEL MOTOR ⊖

P6014 TO FRONT CONNECTION

1	REC INHIBIT SW Ⓗ
2	GND

SERVO C.B.A. (VEP02181A: AG-6200/VEP02181B: AG-6100/VEP02181C: AG-6800)



P2012 TO CAPSTAN MOTOR

1	PHOTO FG1
2	GND
3	PHOTO FG2

FOR AG-6200/6100

P2002 TO FRONT C.P.U. P6211

1	———
2	———
3	DEW SENSOR Ⓛ
4	GND
5	PAL SECAM Ⓗ
6	SECAM Ⓗ

FOR AG-6800

FUN MOTOR CONN. &
P2002 TO SYSTEM CONTROL

1	HR METER ON Ⓗ
2	DEW SENSOR Ⓗ

P2009 TO FRONT JACK P6564

1	TRACKING VR ⊕
2	TRACKING VR ⊖
3	SLOW TRACK +R
4	SLOW TRACK ⊖
5	SLOW TRACK +F

P2003 TO SYSTEM CTL P6007

1	IRQ
2	ADDRESS
3	GND
4	SERIAL CLOCK
5	SERIAL DATA
6	POWER RESET
7	CTL PULSE
8	REEL Ⓜ CTL
9	CLEAR TAPE Ⓗ
10	POWER STOP Ⓗ

P001 TO CYLINDER MOTOR

1	P2
2	P3
3	M2
4	M1
5	MCOM
6	M3
7	GND
8	OSC
9	P1
10	PCOM
11	PG

P2004 TO POWER SUPPLY P1007

1	GND
2	GND
3	GND
4	REG +5V
5	REG +12V
6	UNREG +20V
7	UNREG +20V
8	———

P2005 TO CAPSTAN MOTOR

1	M1
2	MCOM
3	———
4	P1
5	M3
6	POSC
7	PCOM
8	P2

P2006 TO CAPSTAN MOTOR

1	M2
2	PVCC
3	P3
4	———
5	GND
6	LED +B

P2010 TO LUMINANCE,CHROMINANCE P3007

1	V-PULSE
2	SS Ⓛ
3	HEAD SW
4	GND

P2001 TO LUMINANCE,CHROMINANCE P8302

1	GND
2	HEAD SW
3	HSS IN
4	GND
5	ROTARY
6	4.43MHz
7	GND
8	E/E Ⓗ

P2008 TO CONTROL HEAD

1	CTL HEAD ⊖
2	CTL HEAD ⊕

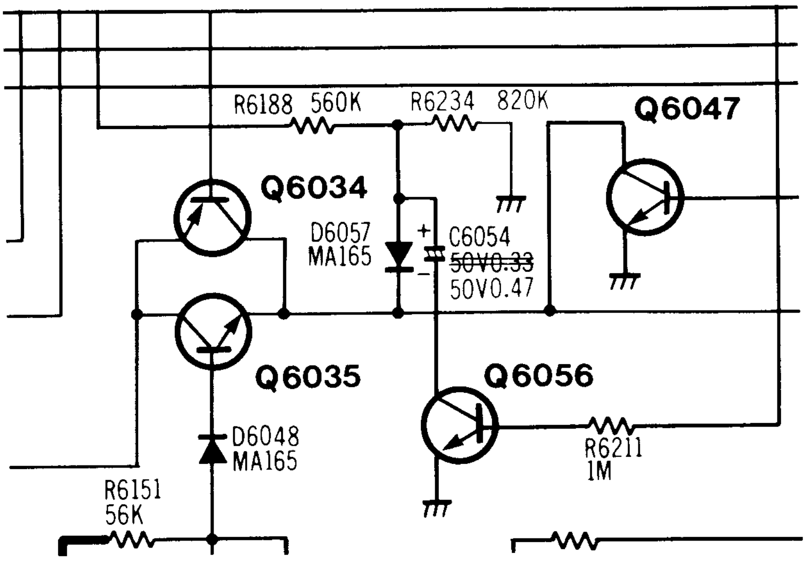
NOTE: UNLESS OTHERWISE SPECIFIED, ALL DIODES ARE MA165
UNLESS OTHERWISE SPECIFIED, ALL Tr's ARE 2SD636

REF. NO. 2000 SERIES

The Blue Coloured Parts are Used in AG-6200/6800 Only.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SPECIFIED PARTS.

The DC voltages in this diagram are measured in PLAY and RECORD mode.
(The voltages indicated in brackets ( ) are measured in RECORD mode.)


R6188 560K
R6234 820K
Q6047
Q6034
D6057
MA165
C6054
~~50V0.33~~
50V0.47
Q6035
Q6056
D6048
MA165
R6211
1M
R6151
56K

[System Control C.B.A. (VEP06190B1)]

Part Number			
Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions
			[System Control C.B.A.(VEP06190B1)]
Q6508	-----	2SD636	Transistor
C6054	ECEA1HKR33	ECEA1HSR47	Capacitor (50V 0.33 → 50V 0.47)
C6060	-----	ECEA0JS101	Capacitor (6V 100)
R6232	-----	ERDS2TJ103	Resistor (10KΩ)
R6233	-----	ERDS2TJ473	Resistor (47KΩ)
R6234	-----	ERDS2TJ824	Resistor (820KΩ)
			[Servo C.B.A.(VEP02181A/B/C)]
R2366	ERDS2TJ103	ERDS2TJ333	Resistor (33KΩ)